46th EDTNA/ERCA International Conference
September 9 – 12, 2017
ICE, Krakow, Poland

CONTENTS

Acknowledgements	**03**
Foreword	**04**
Committees	**06**
Scientific Programme Highlights	**10**
Scientific Programme	**13**
Abstracts	**15**
Saturday, September 9, 2017	**15**
Sunday, September 10, 2017	**18**
Monday, September 11, 2017	**71**
Tuesday, September 12, 2017	**118**
Workshops	**131**
Digital Posters	**141**
Conference Contacts	**257**
Authors' Contacts	**258**
Authors´Index	**261**
Disclamer	**264**

ACKNOWLEDGEMENTS

We would like to express our appreciation for the valuable support our Industry Partner brings by participating at the 46th EDTNA/ERCA International Conference. Partners' support, involvement and advice are greatly appreciated and the success would not be possible without the fantastic collaboration we have. Thank You very much!

Publisher: EDTNA/ERCA, European Dialysis and Transplant Nurses Association/European Renal Care Association, Pilatusstrasse 35, CH-6003 Lucerne, Switzerland
Design and typography: GUARANT International spol. s r.o.
ISBN: 978-84-697-5039-1

FOREWORD

Dear Colleagues,

As Scientific Programme Committee (SPC) Chair it is a great honour for me to welcome you to the **46th EDTNA/ERCA International Conference,** Krakow, Poland 2017, and to present to you the **Conference Abstract Book**.
In accordance with the conference theme, **"True Partnership and Global Approach in Management of Renal Care**", we have developed a Scientific Programme (SP) offering a significant and valuable contribution to renal care focusing on best research and innovations in practice. This year we have changed the format of the Scientific Programme – the best abstracts have been selected according to the marking process results and allocated to the SP, for oral and poster on-stage presentation. This year we have introduced mixed oral sessions with oral and poster presentations at the traditional parallel sessions

In total there were **238** abstracts submitted and blind reviewed, of which **34** were accepted for oral presentation, **55** for poster on stage presentation and **117** for digital poster presentation. For the Krakow conference there were **20** distinguished **guest speakers** invited from **9** different countries: Professor Zbylut Twardowski (Poland) -Opening Ceremony- Dr. Peter O'Halloran (United Kingdom)- Haemodialysis- Mr. Paul Van Malderen (Belgium)- Multimorbidity in renal care- Dr. Joanna Reid (United Kingdom)- Improving quality of renal care- Professor Raymond Vanholder (Belgium)- European Kidney Health Alliance (EKHA)- Dr. Veronica Swallow (United Kingdom)- Paediatric renal care- Dr. Hans Bart (The Netherlands)- Psychological and social impact of renal disease- Professor Maurizio Gallieni (Italy)- Safe vascular access- Mrs. Bettie Hoekstra (The Netherlands)- Peritoneal dialysis- Mrs. Karen Jenkins (United Kingdom)- Conservative renal care- Mr. John Sedgewick (Saudi Arabia)- Education- Mr. Ruben Iglesias (Spain) - Cannulation Technique- Mrs. Vania Gomes Gonçalves (Portugal) - Safety and risk management in Dialysis- Mr. William Johnston (United Kingdom)-The patient experience- Dr. Marta Hrenczuk (Poland) -Transplantation- Mrs. Neerja Jain (United Kingdom) & Mrs Annette Dodds (United Kingdom)
-Open Forum- Dr. Theodora Eirini Sialvera (Greece) – Nutrition - Mrs. Tania Barnes (United Kingdom) -Shared Care in CKD and Professor Andrzej Więcek (Poland)- Closing Ceremony.

Lunchtime sessions & workshops include: The Dialysis Outcomes and Practice Patterns Study (DOPPS) Programme; the Greek Masterclass (Session in Greek language) on Cardiovascular disease & CKD with Dr. Evangelia Dounousi (Greece) & Dr. Margarita Oikonomou (Greece); the Lunch Symposium on Designing education programmes for expert clinical practice with Professor Marie Richards (United Arab Emirates); the Workshop - NxStage Medical, Inc. - Home Haemodialysis – Mrs. Siobhan Gladding (United Kingdom), Workshop - Medtronic - Novel technologies for AV fistula cannulation with Mr. Andrew Cox (United Kingdom), Mr. Ruben Iglesias (Spain) & Mrs. Julia McCarthy, (United Kingdom), Workshop - B. Braun - Exploring Nutrition Support Practices in Haemodialysis with Mr. Paul Challinor (United Kingdom), Workshop - Advance Care Planning (ACP) with Mr. William Johnston (United Kingdom), Dr Joanna Reid (United Kingdom), Dr Peter O'Halloran (United Kingdom), Workshop - Oral care in CKD patients with Dr. Navdeep Kumar (United Kingdom), Mrs. Tai Mooi Ho Wong (Spain), Workshop - Emotional Intelligence for Effective Teamwork with Mr. John Sedgewick (Saudi Arabia), and Workshop - Art of Communication Fresenius Medical Care Supporter of EDTNA/ERCA with Dr. Mike Kelly (Ireland), Mrs Alison McHugh-Larkin (Ireland), Mrs. Debbie Fortnum (Australia).

Two Corporate Education Sessions have been organized: the CES from Fresenius Medical Care and the CES from Vifor Fresenius Medical Care Renal Pharma.

The international Council of Nurses has agreed accreditation of the Conference and awarded the 46th EDTNA/ERCA Conference Scientific Programme with **18.75** European CME credits.

The Abstract Book lists the abstracts of authors and guest speakers, presented in session order as they appear in the final Scientific Programme. The book can be used to keep in touch with presenters and Association members.

I take this opportunity to thank all presenting authors and EDTNA/ERCA Volunteers who with their effort, time and enthusiasm make the Conference a success; to Industry partners for supporting education sessions and the exhibition, and the Conference Department for their professional collaboration.

The Scientific Programme Committee has worked hard to ensure delegates attend an informative and exciting conference offering a valued learning experience. We hope you enjoy a creative and constructive EDTNA/ERCA conference.

Anastasia Liossatou
Scientific Programme Committee Chair

COMMITTEES

EXECUTIVE COMMITTEE

Marianna Eleftheroudi	President ad Interim	ma.eleftheroudi@gmail.com
Edita Noruisiene	Treasurer & Secretary ad Interim	nor.edita@gmail.com
Ilaria de Barbieri	EC Member	iladeba@alice.it
Evgenia Golland	EC Member	jgolland@gmail.com
Maria Teresa Parisotto	EC Member	mparisotto@icloud.com
Ana Raquel Ribeiro	EC Member	rraquelribeiro@gmail.com

SUPERVISORY BOARD

Maria Cruz Casal	Publication Coordinator	maria.cruz.casal@gmail.com

INDUSTRY RELATIONS

Anki Davidson	Marketing Director	anki.davidson@adexcellentbranding.com

FINANCE SUPPORT

Alois Gorke	Finance Coordinator	aloisgorke@t-online.de

CONFERENCE SCIENTIFIC PROGRAMME COMMITTEE

Anastasia Liossatou	Chair	aliossatou@gmail.com
Marianna Eleftheroudi	EC Link	ma.eleftheroudi@gmail.com
Berislav Poje	Member	berislav.poje@gmail.com
Helen Noble	Member	helen.noble@qub.ac.uk

LOCAL ORGANIZING COMMITTEE

Anna Klis	Chair	aneczkakl@interia.pl
Malgorzata Liber	Member	malgorzata.liber@fmc-ag.com
Aneta Trzcinska	Member	trzaneta@gmail.com

EDTNA/ERCA BRAND AMBASSADORS

Debbie Fortnum	Australia and New Zealand	debkevka1@bigpond.com
Michel Roden	Belgium	rodenmichel@gmail.com
Nataša Graho	Croatia	natasa.graho@gmail.com
Jitka Pancířová	Czech Republic	pancirova@volny.cz
Jeanette Finderup	Denmark	jeajee@rm.dk
Angela Drähne	Germany	angela.draehne@web.de
Stavroula Vovlianou	Greece	stavroulavov@gmail.com
Galia Rusakov Barbalat	Israel	Galibar76@gmail.com
Francesca Licia Presentati	Italy	ceccia79@hotmail.it
Irmina Vaicekauskyte	Lithuania	irmiina@gmail.com
Anna Kliś	Poland	aneczkakl@interia.pl
Raquel Ribeiro	Portugal	rraquelribeiro@gmail.com
Bozica Stupar	Serbia	stupar.bozica@gmail.com
Sonja Pečolar	Slovenia	sonja.pecolar@sb-sg.si
Anna Junque	Spain	annajunque@yahoo.es
Mukadder Mollaoglu	Turkey	mollaoglumukadder@gmail.com
Linsey Worsey	United Kingdom	linseyworsey@nhs.net
Marie Richards	United Arab Emirates	marichards@sds.seha.ae

ITALIAN BRANCH

Marisa Pegoraro	Italy	marisapegoraro.996@gmail.com
Maria Pia Zito	Italy	mariapiazito1@gmail.com

JOURNAL OF RENAL CARE

Nicola Thomas	Journal Editor	nicola.thomas@lsbu.ac.uk
Magnus Lindberg	JoRC Associate Editor	magnus.lindberg@hig.se

CONSULTANTS

Lesley Bennett	Anaemia	Lesley.Bennett@orh.nhs.uk
Karen Jenkins	CKD	karenjenkins1@nhs.net
Anna Poulia Kalliopi	Nutrition	lpoulia@gmail.com
Maria Arminda Tavares	Peritoneal Dialysis	armindamast@gmail.com
Mike Kelly	Psychological Care	mike@ika.ie
John Sedgewick	Education Middle East and Africa	john.sedgewick@btopenworld.com
Ruben Iglesias	Haemodialysis	riglesias1977@gmail.com
Tai Mooi Ho Wong	Project Coordinator	TMHo@parcdesalutmar.cat

DOPPS PROJECT

Anna Marti i Monros	Project Manager	anna.marti.monros@gmail.com
Yolande Pirard	CRA Lead Belgium French speaking area	yolande.pirard@skynet.be
Sunny Eloot	CRA Belgian Dutch speaking area	sunny.eloot@ugent.be
Martin Schünemann	CRA Lead Germany	Martin.Schuenemann@gmx.net
Marisa Pegoraro	CRA Lead Italy	msarisapegoraro.996@gmail.com
Giovanni Carbone	CRA Italy	carbonegiovanni6@gmail.com
Jeanette Wallin	CRA Lead Sweden	jeanette.wallin@ds.se
Elena Cavero Porrero	CRA Lead Spain	elenacavero@outlook.es
Rafael Casas	CRA Spain	rafcasas@ono.com
Jennie King	CRA Lead UK	jennieking2013@gmail.com
Birsen Yürügen	CRA Lead Turkey	birsenyurugen@gmail.com
Zehra Aydin	CRA Turkey	zehraydin@gmail.com
Karen Chalmers	CRA Lead UK	karen.chalmers@nhs.net

Chief Abstract Assessors 2017

Haemodialysis A	Roden Michel
Haemodialysis B (Technical-Dialysis Adequacy)	Anna Marti Monros
Haemodialysis C (AKI /acute and Chronic)	Anastasia Liossatou
Safe vascular access	Ruben Iglesias
Peritoneal Dialysis	Aase Riemann
Transplantation	Maria Cruz Cazal
CKD prevention & delay	Karen Jenkins
Paediatric renal care	Ilaria de Barbieri
Education	John Sedgewick
Improving quality of renal care	Nicola Thomas
Diabetes & nephrology	Marie Richards
Safety and risk management in RRT	Jitka Pancirova
Conservative renal care	Karen Jenkins
Dialysis Catheter Care	Berislav Bero Poje
Psychological and social impact of renal disease	Mike Kelly
Home dialysis	Sophie Halldin
E-Technology in renal care	Aase Rieman
Nutrition	Liana Poulia
Ethical Issues in renal care	Debbie Fortnum
Multi-morbidity in renal care	Karen Pugh-Clarke
Shared Care in CKD	Debbie Fortnum
Work stress and burnout	Mike Kelly
Open Forum	Susan Rogers

GUEST SPEAKERS

Guest speakers for Plenary Session S 01	
Patrick Byhmer (Sweden)	S 01
Anki Davidson (Sweden)	S 01
Angela Drähne (Germany)	S 01
Debbie Fortnum (Australia)	S 01
Siobhan Gladding (United Kingdom)	S 01
Mike Kellly (Ireland)	S 01
Maria Paz Sorribes Lopez (Spain)	S 01
Martin Meier (Germany)	S 01
Maria Teresa Parisotto (Germany)	S 01
John Sedgewick (Saudi Arabia)	S 01
Laura Stevens (United Kingdom)	S 01
Irmina Vaicekauskyte (Lithuania)	S 01

Guest speaker for the Opening Ceremony	
Zbylut Twardowski (Poland)	S 02

Guest speaker for the Closing Ceremony	
Andrzej Wiecek (Poland)	S 25

Guest speakers (in alphabetical order)	
Tania Barnes (United Kingdom)	S 24
Hans Bart (The Netherlands)	S 14
Andrew Cox (United Kingdom)	W 02A-D
Paul Challinor (United Kingdom)	W 08
Annette Dodds (United Kingdom)	S 22
Evangelia Dounousi (Greece)	S 09
Maurizio Gallieni (Italy)	S 15
Siobhan Gladding (United Kingdom)	W 01A-H
Vania Gomes Gonçalves (Portugal)	S 06
Marta Hrenczuk (Poland)	S 21
Bettie Hoekstra (The Netherlands)	S 16
Neerja Jain (United Kingdom)	S 22
Karen Jenkins (United Kingdom)	S 12
William Johnston (United Kingdom)	W 05, S 20
Anna Klis (Poland)	W 03, W 08
Navdeep Kumar (United Kingdom)	W 06
Alison McHugh-Larkin (Ireland)	W 10
Anna Lepkowska (Poland)	W 08
Paul Van Malderen (Belgium)	S 07

Julia McCarthy (United Kingdom)	W 02A-D
Martin Meier (Germany)	W 08
Peter O´Halloran (United Kingdom)	S 04, W 05
Margarita Oikonomou (Greece)	S 09
Joanna Reid (United Kingdom)	S 11, W 05
Marie Richards (United Arab Emirates)	S 15, S 18
Ruben Iglesias Sanjuan (Spain)	S 05, W 02A-D
John Sedgewick (Saudi Arabia)	S 19, W 07
Theodora Eirini Sialvera (Greece)	S 23
Veronica Swallow (United Kingdom)	S 13
Raymond Vanholder (Belgium)	S 17
Ben Weise (Germany)	W 04, W 08
Tai Mooi Ho Wong (Spain)	W 06

Corporate Education Session speakers (in alphabetical order)	
Stefaan Claus	S 10
Helga Frank	S 10
Daniel Gallego	S 10
Maurizio Gallieni	S 03
Joao Fazendeiro Matos	S 03
Cristina Miriunis	S 03
Maria Teresa Parisotto	S 03

SCIENTIFIC PROGRAMME HIGHLIGHTS

SCIENTIFIC PROGRAMME HIGHLIGHTS

SCIENTIFIC PARALLEL SESSIONS

During the sessions, invited Guest Speakers will discuss the latest developments in renal care. Quality Abstracts will be selected for inclusion in these parallel sessions including best poster presentations.

Professor Zbylut Twardowski (Poland)

S 02 Opening Ceremony: Kt/V Urea index should be forgotten - sodium is a real uremic toxin

Dr. Peter O'Halloran (United Kingdom)

S 04 Haemodialysis: Advance care planning (ACP) with older patients who have end-stage kidney disease: results from a feasibility study

Mr. Ruben Iglesias (Spain)

S 05 Cannulation Technique: Vascular access ultrasound in nursing practice. Concepts and usefulness

Mrs. Vania Gomes Gonçalves (Portugal)

S 06 Safety and risk management in Dialysis: Quality and safety tools in dialysis practice

Mr. Paul Van Malderen (Belgium)

S 07 Multimorbidity in renal care: Evolution of morbidity: what we learn from 30 years registration of 'dialysis practice' in Flanders

Dr. Joanna Reid (United Kingdom)

S 11 Improving quality of renal care: Establishing a clinical phenotype for cachexia in end stage kidney disease

Mrs. Karen Jenkins (United Kingdom)

S 12 Conservative renal care: Conservative Care - an equal treatment choice

Dr. Veronica Swallow (United Kingdom)

S 13 Paediatric renal care: Families and health professionals: developing and evaluating a digital, home-based care-management app in childhood CKD

Dr. Hans Bart (The Netherlands)

S 14 Psychological and social impact of renal disease: An experienced based decision aid on renal replacement therapy

Professor Maurizio Gallieni (Italy)

S 15 Safe vascular access: The importance of the Vascular Access Coordinator

Mrs. Bettie Hoekstra (The Netherlands)

S 16 Peritoneal dialysis: Homeward bound. Achieving more home care in PD

Professor Raymond Vanholder (Belgium)

S 17 European Kidney Health Alliance (EKHA): Europe and kidney disease: where nurses, patients, foundations and physicians join forces. Structure and activities of EKHA. Towards more sustainable kidney care by impoving global health.
Patient choice and education: results of a European questionnaire in 9 European countries

Mr. John Sedgewick (Saudi Arabia)

S 19 Education: The Magnet Nursing Environment - implications for renal practice

Mr. William Johnston (United Kingdom)

S 20 The patient experience: Renal Art Groups

Dr. Marta Hrenczuk (Poland)
S 21 Transplantation: Simultaneous pancreas-kidney transplantation: Managing nursing practice challenges

Mrs. Neerja Jain (United Kingdom) & Mrs. Annette Dodds (United Kingdom)
S 22 Open Forum: How renal patients can help with research

Dr. Theodora Eirini Sialvera (Greece)
S 23 Nutrition: The role of diet in hypertension for the prevention and treatment of CKD

Mrs. Tania Barnes (United Kingdom)
S 24 Shared Care in CKD: Unlocking potential through Shared haemodialysis Care

Professor Andrzej Więcek (Poland)
S 25 Closing Ceremony: The future of anemia management in patients with chronic kidney disease

LUNCH TIME SYMPOSIA

S 08 Lunch Symposium – The Dialysis Outcomes and Practice Patterns Study (DOPPS) Programme

S 09 Lunch Symposium Greek Masterclass
(Session in Greek language)
Dr. Evangelia Dounousi (Greece)
Cardiovascular disease in patients with CKD. The Nephrologist's role

Dr. Margarita Oikonomou (Greece)
Cardiovascular disease in patients with CKD. The Renal Nurse's role

S 18 Lunch Symposium-What do specialist nurses want to be able to do and what do they need to know to do it?
Designing education programmes for expert clinical practice
Professor Marie Richards (United Arab Emirates)

WORKSHOPS

W 01A-H Workshop - NxStage Medical, Inc. - Home Haemodialysis –
A Nurses Guide to Implementing
Best Practice in Home Haemodialysis
Mrs. Siobhan Gladding (United Kingdom)

W 02A-D Workshop - Medtronic - Novel technologies for AV fistula cannulation:
A hands on workshop to improve hemodialysis outcomes
Mr. Andrew Cox (United Kingdom), Mr. Ruben Iglesias (Spain),
Mrs. Julia McCarthy, (United Kingdom)

W 03 Workshop – Innovative Health Technologies – Dialysis catheter care -
Theoretical study result – Catheter protection dressings. Improving patients' quality of life
Mrs. Anna Klis (Poland)

W 04 Workshop - B. Braun – Exploring Nutrition Support Practices
in Haemodialysis Units – From a theoretical perspective
Mr. Paul Challinor (United Kingdom)

W 05 Workshop – Advance Care Planning (ACP) with older patients who have end-stage kidney disease: practical and theoretical insights from a process evaluation
Mr. William Johnston (United Kingdom), Dr Joanna Reid (United Kingdom), Dr Peter O'Halloran (United Kingdom)

W 06 Workshop – Oral care in CKD patients
Dr. Navdeep Kumar (United Kingdom), Mrs. Tai Mooi Ho Wong (Spain)

W 07 Workshop – Emotional Intelligence for Effective Teamwork
Mr. John Sedgewick (Saudi Arabia)

W 08 Workshop - B. Braun – Exploring Nutrition support Practices in haemodialysis units - From a practical perspective
Mr. Paul Challinor (United Kingdom)

W 09 Workshop – Innovative Health Technologies
Dialysis catheter care – Dressings for catheter protection
Mrs. Anna Klis (Poland) & Anna Lepkowska (Poland)

W 10 Workshop – Art of Communication
Fresenius Medical Care Supporter of EDTNA/ERCA
Dr. Mike Kelly (Ireland), Mrs Alison McHugh-Larkin (Ireland), Mrs. Debbie Fortnum (Australia)

CORPORATE EDUCATIONAL SESSIONS

S 03 CES Fresenius Medical Care
Auditorium Hall, Sunday, September 10, 2017, 9:00 - 10.30

S 10 CES Vifor Fresenius Medical Care Renal Pharma
Auditorium Hall, Sunday, September 10, 2017, 14:00 - 15.30

SCIENTIFIC PROGRAMME

SATURDAY, SEPTEMBER 9, 2017

16:00—17:45	Auditorium Hall	S 01	Plenary Session	14
18:00—19:30	Auditorium Hall	S 02	Opening Ceremony	16

SUNDAY, SEPTEMBER 10, 2017

9:00—10:30	Auditorium Hall	S 03	Corporate Education Session - Fresenius Medical Care	17
9:00—10:30	Theatre hall	S 04	Parallel Session - Haemodialysis	18
11:00—12:30	Auditorium Hall	S 05	Parallel Session - Cannulation Technique	26
11:00—12:30	Theatre hall	S 06	Parallel Session - Safety and risk management in Dialysis	33
11:00—12:30	Chamber Hall	S 07	Parallel Session - Multimorbidity in renal care	40
12:45—13:45	Theatre Hall	S 08	Lunch Symposium-DOPPS Clinical Symposium	47
12:45—13:45	Chamber Hall	S 09	Lunch Symposium - Greek Masterclass	48
14:00—15:30	Auditorium Hall	S 10	Corporate Education Session - Vifor Fresenius Medical Care Renal Pharma Ltd.	50
14:00—15:30	Theatre Hall	S 11	Parallel Session - Improving quality of renal care	51
16:00—17:30	Auditorium Hall	S 12	Parallel Session - Conservative renal care	58
16:00—17:30	Theatre Hall	S 13	Parallel Session - Paediatric renal care	65

MONDAY, SEPTEMBER 11, 2017

9:00—10:30	Auditorium Hall	S 14	Parallel Session - Psychological and social impact of renal disease	71
9:00—10:30	Theatre hall	S 15	Parallel Session - Safe vascular access	77
11:00—12:30	Theatre hall	S 16	Parallel Session - Peritoneal dialysis	84
11:00—12:30	Chamber Hall	S 17	Parallel Session - European Kidney Health Alliance (EKHA)	89
12:45—13:45	Theatre Hall	S 18	Lunch Symposium	90
14:00—15:30	Auditorium Hall	S 19	Parallel Session - Education	91
14:00—15:30	Theatre Hall	S 20	Parallel Session - The patient experience	98
16:00—17:30	Auditorium Hall	S 21	Parallel Session - Transplantation	105
16:00—17:30	Theatre Hall	S 22	Parallel Session - Open Forum	111

TUESDAY, SEPTEMBER 12, 2017

08:30—10:00	Theatre Hall	S 23	Plenary Session - Nutrition	118
10:15—11:45	Theatre Hall	S 24	Plenary Session - Shared Care in CKD	123
12:00—13:00	Theatre Hall	S 25	Closing Ceremony	130

WORKSHOPS

W 01A-H	Conference Hall Complex A	Workshop - NxStage Medical, Inc. Home Haemodialysis - A Nurses Guide to Implementing Best Practice in Home	131
W 02A-D	Conference Hall Complex G	Workshop – Medtronic Novel technologies for AV fistula cannulation: A Hands on Workshop to improve hemodialysis outcomes	132
W 03	Workshop - Ground Level	Workshop - Innovative Health Technologies- Theoretical part Theoretical study result - Catheter protection dressings. Improving patients' quality of life	133
W 04	Workshop - Ground Level	Workshop - B. Braun Exploring Nutrition Support Practices in Haemodialysis Units- From a theoretical perspective	134
W 05	Conference Hall Complex B	Workshop - Advance Care Planning (ACP) with older patients who have end-stage kidney disease: practical and theoretical insights from a process evaluation	135
W 06	Conference Hall Complex B	Workshop - Oral care on CKD patients	136
W 07	Conference Hall Complex B	Workshop - Emotional Intelligence for Effective Teamwork	137
W 08	Conference Hall Complex B	Workshop - B. Braun Exploring Nutrition support Practices in haemodialysis units- From a practical perspective	138
W 09	Conference Hall Complex B	Workshop - Innovative Health Technologies Dialysis catheter care - Dressings for catheter protection	139
W 10	Workshop - Ground Level	Workshop - Art of Communication Fresenius Medical Care Supporter of EDTNA/ERCA	140

ABSTRACTS
SATURDAY, SEPTEMBER 9, 2017
S 01 Plenary Session
Auditorium Hall, 16:00-17:45

True Partnership - The EDTNA/ERCA Collaboration Programme moving forward
Anki Davidson, EDTNA/ERCA (Sweden)
Abstract is not available

Home Haemodialysis A Nurses Guide to Implementing Best Practice in Home Haemodialysis - A joint project between EDTNA/ERCA & NxStage
Siobhan Gladding, NxStage (United Kingdom)
Abstract is not available

Exploring Nutrition Support Practices in Haemodialysis Units - A joint project between EDTNA/ERCA & B. Braun
Martin Meier, B. Braun (Germany)
Debbie fortnum (Australia)

Introduction
Protein – energy wasting (PEW) is a common problem in patients with chronic kidney disease (CKD). Nutrition screening and assessment are the first steps to identify the problem and to plan the provision of nutrition support in these patients.

Aim
The aim of the survey is to examine nutrition screening and support practices among healthcare professionals dealing with renal patients worldwide.

Design
Online questionnaires were developed and translated into 9 languages to facilitate its completion by healthcare professionals working in the field or nephrology in Europe, Asia, Middle East, and Africa. The questionnaire included questions regarding nutritional screening and assessment methods, nutritional support practices in different clinical settings (i.e. conservative treatment, hemodialysis, peritoneal dialysis, and transplantation units). Moreover, questions on the barriers to provide nutritional support were also included in the questionnaire, in order to identify reasons for insufficient nutritional advice and/or support.

Conclusion
Based on the results of the survey which will be presented during the session, measures will be proposed to enhance the quality of nutrition support practices for renal patients, by eliminating the barriers and enforcing the access for continuous education on nutrition related issues for healthcare professionals dealing with renal patients.

Safety going Digital - Venous Needle Dislodgement - Next Step - A joint project between EDTNA/ERCA & Redsense Medical
GS: Patrik Byhmer (Sweden)
GS: Angela Drähne (Germany)

Dialysis without barriers - Holiday Dialysis - A joint project between EDTNA/ERCA & Diaverum
Anki Davidson, EDTNA/ERCA (Sweden)
Abstract is not available

The Art of Communication – A Nurses Guide to Implementing Best Practice in Communication - Fresenius Medical Care Supporter of EDTNA/ERCA

GS: Mike Kelly (Ireland)
GS: Maria Teresa Parisotto (Germany)

Background

We all know the value and importance of clear and regular communication in our work with patients. We can all recall times when our communication has led to misunderstanding rather than clarity. Also, there are times we can point to when our communication was crystal clear and had its desired effect. This demonstrates that communication is not as straightforward as we imagine. Our communication can be influenced by many factors, for example, language, culture, mood and body language.

Objectives

We will present some of the common mistakes we make in communication.

Acknowledgement of the Accreditation of Nephrology Education

John Sedgewick (Saudi Arabia)
Abstract is not available

S 02 Opening Ceremony
Auditorium Hall, 18:00-19:30

Kt/V $_{urea}$ index should be forgotten – sodium is a real uremic toxin
Zbylut Twardowski (Poland)

Chronic haemodialysis sessions, as developed in Seattle in the 1960s, were long procedures with minimal intra- and interdialytic symptoms. Over the next three decades, dialysis duration was shorten to 4, 3, even 2 h in thrice weekly schedules. This method spread rapidly, particularly in the United States, after the National Cooperative Dialysis Study suggested that the time of dialysis is of minor importance as long as urea clearance multiplied by dialysis time and scaled to total body water (Kt/V_{urea}) equals 0.95-1.0. This number was later increased to 1.3, but the assumption that haemodialysis time is of minimal importance remained unchanged. However, Kt/V_{urea} measures only the removal of urea and other uncharged low molecular weight substances and does not consider the removal of larger and/or charged molecules. Nor does it correlate with the other important function of haemodialysis, namely ultrafiltration. Rapid ultrafiltration is associated with cramps, nausea, vomiting, headache, fatigue, hypotensive episodes during dialysis, and hangover after dialysis; patients remain fluid overloaded with subsequent poor blood pressure control leading to left ventricular hypertrophy, diastolic dysfunction, and high cardiovascular mortality. Kt/V_{urea} should be abandoned as a measure of dialysis quality. The formula suggests that it is possible to decrease t as long as K is proportionately increased, but this is not true. Time of dialysis should be adjusted in such a way that patients would not suffer from symptoms related to rapid ultrafiltration, would not have other uremic symptoms and most patients would have blood pressure controlled without antihypertensive drugs.

References:
Twardowski ZJ. Treatment time and ultrafiltration rate are more important in dialysis prescription than small molecule clearance. Blood Purif. 2007; 25: 90 – 98.
Twardowski ZJ. Short, thrice-weekly hemodialysuis is inadequate regardless of small molecule clearance. Int J Artif Organs 2004; 27: 452-466.

SUNDAY, SEPTEMBER 10, 2017

S 03 Corporate Education Session - Fresenius Medical Care

Nursing assessment – show its value! Documented vascular access monitoring for better outcomes

Auditorium Hall, 9:00-10:30

The vascular access (VA) patency depends on diagnostic accuracy and active and timely interventions. Complications related to the vascular access are the leading cause of hospitalization for the haemodialysis patients. Preventing the development of complications can reduce morbidity, improve quality of life, and reduce the costs of health care in the dialysis population. Regular monitoring and surveillance of all risk factors directly related to VA, as well as of any comorbidity that may influence its function and preservation, are recommended.
Most of the problems that occur in association with the patient's vascular access can be detected by physical examination and clinical evaluation. A brief physical examination of the patient's VA should always be performed prior to each dialysis treatment.

The physical exam should include:

- visual inspection of the access (for signs of infection)
- palpation to assess for evidence of stenosis or thrombosis
- auscultation with a stethoscope to identify any changes in the bruit

Other indicators:

- Fail to achieve prescribed blood flow
- Record of abnormal values during arterial and venous pressure monitoring
  - Pre-pump arterial pressure monitoring (persistent elevated negative pre-pump arterial pressure)
  - Constantly increased venous pressure
- Bleeding during cannulation or prolonged bleeding after needle withdrawal
- Unexplained decrease in adequacy (Kt/V and URR)
- Difficult cannulation by expert cannulators
- Recurrent episodes of needle infiltration and appearance of clots

VA surveillance (defined as periodic evaluation by measurement of access blood flow, direct or derived static pressure, duplex ultrasound evaluations) may be useful and should be establish regularly.

To assure an efficient monitoring and surveillance programme, each dialysis unit should appoint a vascular access coordinator to manage established protocols define methodologies for reporting the findings. Based on these the VA coordinator will be able tomanage timely referral of patients with VA dysfunctions to further investigations and interventions. Tools must be created to store the data collected either manually or electronically. The results and findings of the vascular access monitoring (physical examination and/or non-invasive surveillance methods) should be inserted into a specific database.
Bimonthly multidisciplinary team meetings should be organised to discuss the data of those patients presenting with dysfunctional factors, which will require further investigation.

CES main Title: Nursing assessment – show its value! Documented vascular access monitoring for better outcomes.
Speakers´title
Dr. Maurizio Gallieni: Documentation is knowledge! Monitoring the VA allows preservation of the patients' lifelines
RN Joao Fazendeiro: Make our daily work visible: Nursing assessment and documentation of vascular access is a true value!
RN Cristina Miriunis: Nothing has happened if it was not documented! A long awaited tool to support vascular access monitoring
RN Maria Teresa Parisotto: Giving life to numbers! A comprehensive data analysis to improve knowledge and practice on vascular access management.

GUEST SPEAKER

Advance care planning with patients who have end-stage kidneya disease: a feasibility study

P. O'Halloran[1], H. Noble[1], K. Brazil[1], C. Cardwell[2], M. Clarke[2], F. Murtagh[3], R. Mullan[4], J. Brown[5], J. Shields[5], P. Maxwell[5]

[1]School of Nursing and Midwifery, Queen's University Belfast, Belfast, United Kingdom; [2]Centre for Public Health, Queen's University Belfast, Belfast, United Kingdom; [3]Hull York Medical School, University of Hull, Hull, United Kingdom; [4]Renal Services, Northern Health and Social Services Trust, Antrim, United Kingdom; [5]Nephrology Service, Belfast Health and Social Care Trust, Belfast, United Kingdom

Background

Chronic kidney disease (CKD) and kidney failure (end-stage kidney disease - ESKD) become more common as people age. They increase the risks of other major illnesses and sudden death. Even so, many people with ESKD do not discuss their preferences for end-of-life care with their families or healthcare professionals. Advance care planning (ACP) can help patients and families think through their preferences for future care and discuss these with the professionals looking after them. This may lead to care more in keeping with patients' wishes and so reduce distress for patients and families. Consequently, ACP is recommended as good practice for people with ESKD. However, we still need to find out more about the impact of ACP on patients and families; and also about the best ways to put it into practice. This study is designed to test the research methods for a larger study that would answer those questions.

Objectives

Objectives are to investigate: optimal intervention systems for delivering ACP; recruitment and retention rates; randomisation procedures; suitability of survey instruments and outcome measures; time needed to collect and analyse data; and methods for assessing cost effectiveness in a full trial.

Methods

Denying the opportunity for ACP would be unethical, so 40 patient/carer dyads will be randomised in a 12 week RCT to immediate or deferred entry groups to allow between group comparisons, before the deferred entry group proceeds to ACP. Intervention processes will be followed through using observational and qualitative methods for 12 months, to identify key factors for implementation success.

Disclosure: No conflict of interest declared

O 01

Machine TMP is a misleading parameter to follow haemodialyser clotting

S. Claus[1], F.Van Ommeslaeghe[1], W. Van Biesen[1], M. Dierick[2], L. Van Hoorebeke[2], A. Dhondt[1], S. Eloot[1]

[1]Nephrology, Ghent University Hospital, Gent, Belgium; [2]Centre for X-ray Tomography, Physics and Astronomy, Ghent University, Gent, Belgium

Background

In haemodialysis (HD) patients, coagulation in the extracorporeal circuit decreases dialysis efficiency and results in patients blood loss in case of complete clotting. Machine transmembrane pressure (TMP) is one of the parameters routinely used to detect coagulation. This study uses a golden standard CT scanning technique to evaluate accuracy of different machine parameters and visual scoring to reflect haemodialyser clotting.

Methods

Twenty stable HD patients were treated with haemodiafiltration for 245±20min with an FX600 haemodialyser on a 5008 dialysis machine (both Fresenius, Germany), and standard anticoagulation. Every 30min, machine parameters were registered: blood, dialysate, ultrafiltration and substitution flows and volumes, venous and arterial pressure, TMP, blood volume monitoring and online clearance monitoring. After dialysis, haemodialyser and venous chamber and line were visually scored for colour and presence of clots. Next, continuous positive pressure ventilation was applied in the dialyser for 24h after which dialyser dry mass was measured. As golden standard, micro CT scanning (resolution 25µm) was performed in the 20 used and 3 non-used dialysers and, after image reconstruction, the non-coagulated fibers were counted in a representative cross-section at the dialyser outlet (ImageJ, Fiji).

Results

In the non-used vs used FX600 dialysers, 10748±2 vs 8930±2465 [range 534-10692] open fibers were counted. The number of non-coagulated fibers was correlated with the visual scoring of the dialyser ($R=-0.637$;$P=0.003$) and venous chamber ($R=-0.584$; $P=0.007$), and the post-dialysis dry mass of the dialyser ($R=-0.786$;$P<0.001$), but not with any of the online available machine parameters.

Conclusion/Application to practice

Although popular, machine TMP cannot accurately predict coagulation in the extracorporeal circuit.

Disclosure: No conflict of interest declared

O-P 01

What parameters influence the coagulation of the circuit and/or dialyzer?

J. Guerrero[1], D. Hernan[1], N. López[1], E. Guerrero
[1]Friat, Friat, Madrid, Spain

Background

We intend to relate the parameters of dialysis sessions with the analytical values of the patients and the dose of heparin to find possible relationships in the coagulation status of the circuit and/or dialyzer. We assume that there are probably patients that are either overdosed or otherwise need more anticoagulant during dialysis.

Objectives

1-To check if there is a relationship between the status of the dialyzer and the dose of heparin. Also bearing in mind the weight of patients and the dialysis hours.
2-To check if there is a relationship between the state of the dialyzer and the hemoconcentration, measuring the hematocrit and albumin in the blood.
3-To check if there is a relationship between the state of the dialyzer and the blood flow during the dialysis and the pressures of the circuit.

Methods

Retrospective longitudinal study of a population of 115 renal patients. All data from 16,769 dialyses in a dialysis unit throughout 2016.
The variables measured were:
- Venous/arterial pressure
- Blood-flow (pump)
- Weight
- Heparin sodium prescribed
- Status of dialyzer and lines of the circuit at the end ofdialysis
- Time of dialysis
- Use or not of anticoagulants/antiplatelet agents
- Levels of albumin and hematocrit.

All data has been taken from the electronic medical record and then processed in Excel and SPSS.

Results

We have not found any significant differences between the dose of heparin and the coagulation status of the circuit, perhaps because patients are usually overdosed.
Nor can we conclude that, with hematocrits or albumin levels elevated, the coagulation is higher. Nor does it affect the venous-arterial pressure or blood flow.

Conclusion/Application to practice

However, we have found that elevated levels of hematocritproducea higher venous pressure. In order to preserve the vascular access, we should consider reducing it (suspending erythropoietin treatment and/or discarding blood from the circuit at the end of the dialysis).

Disclosure: No conflict of interest declared

O-P 02

The relationship between dialysate sodium and inter-dialytic weight gain in chronic haemodialysis patients

P. Seidel[1], R. Israely[1], I. Neiman[1], R. Zelker[1], I. Ben-Dov[1]

[1]Dialysis-Ziv, Hadassah Medical Organization, Jerusalem, Israel

Background

In patients with chronic haemodialysis fluid overload is related to morbidity and mortality. Control of inter-dialytic weight gain (IDWG) is an ongoing treatment challenge, dependent on numerous factors; therefore, there is no singular solution.

Previous research has indicated that general reduction of dialysate sodium concentrations leads to hemodynamic instability without improving quality of dialysis outcomes.

Objectives

To investigate the relationship of reduced dialysate sodium per patient with serum sodium and IDWG.

Methods

A retrospective nursing chart review from an outpatient chronic haemodialysis unit. The original protocol called for sodium dialysate concentrations of 143-140 mmol/liter. The study allowed for reduction of dialysate sodium concentrations in accordance with the individual patient's tolerance, as determined by hemodynamic stability. Hemodynamic status was evaluated by blood pressure monitoring. IDWG gain was evaluated by weight 6650 individual weight measurements. Serum sodium was determined with 401 blood test readings.

Results

With the change in protocol there was a successful reduction of dialysate sodium concentration to 137-139 mmol/liter with successful maintenance of hemodynamic stability. A reduction of dialysate sodium concentrations resulted in a reduction in serum sodium concentration (T= 2.246; P=0.029). Of the target group (N=32) there was an average reduction of inter-dialytic weight gain from 2.7 kg to 2.3 kg. (T= 2.339, P= 0.023).

Conclusion/Application to practice

Reduced dialysate sodium concentration might have an effect on serum sodium as well as IDWG. The reduction of dialysate sodium concentration on an individual, per patient basis can afford the nursing staff a tool in the care of the chronic haemodialysis patient.

Disclosure: No conflict of interest declared

O-P 03

Reduced actual sleep and sleep efficiency in patients on in-centre nocturnal haemodialysis

E. Holvoet[1], S. J. Maertens[1], W. Van Biesen[1], S. Eloot[1]

[1]Nephrology, Ghent University Hospital, Gent, Belgium

Background

Haemodialysis (HD) patients experience a high burden of physical and emotional symptoms directly affecting their quality of life. In this study, objective and subjective measures to quantify sleep have been applied.

Methods

Assumed sleep time (i.e. time between falling asleep and waking-up), actual sleep time and sleep efficiency (i.e. actual sleep as % of time in bed) were measured in 20 daytime and 6 nocturnal HD patients (all in-centre 3x/week) by application of a Motion-watch on the non-fistula arm for at least two consecutive nights. Patients also completed Insomnia Severity Index (ISI) and Pittsburgh Sleep Quality Index (PSQI) questionnaires.

Results

Sleep parameters were not different between the nights just after *versus* just before dialysis in the daytime HD patients. In the nocturnal HD group, assumed but not actual sleep time was longer during the non-dialysis *vs* dialysis night. Nocturnal *vs* age matched daytime HD patients have a lower actual sleep time (5:38±1:10 *vs* 7:04±1:18, P=0.003) and lower sleep efficiency (72±13 *vs* 85±7%, P=0.024). No differences were found in ISI and PSQI score between both groups. While ISI and PSQI correlate with actual sleep time in the nocturnal HD group, questionnaire scores did not correlate to any of the objective Motion watch sleep parameters in the daytime HD group.

Conclusion/Application to practice

Nocturnal HD patients sleep less, and less efficient than daytime HD patients. Objective and subjective measures of sleep quality do not match in daytime HD patients.

Disclosure: No conflict of interest declared

O-P 04

Comparison of sleep quality and an adequate dialysis index in patients undergoing haemodialysis

B. Terzi[1], E. Topbas[1], H. Cavus Ergul[1]

[1]Nursing Department, Amasya University, School of Health, Amasya, Turkey

Background

Sleep, as one of the key life activities, is an important indicator of quality of life. Chronic renal failure (CRF), with a high prevalence, is a serious condition that can adversely affect the sleep quality of patients.

Methods

This study was carried out to investigate the correlation between the sleep quality and dialysis adequacy in haemodialysis patients in a population and sample consisting of 50 patients receiving haemodialysis treatment at a training & research hospital in Amasya. Data was collected using “Patient Information Form”, “Pittsburgh Sleep Quality Index (PSQI)” and "Good Dialysis Index (GDI)". Sleep patterns of patients during haemodialysis were observed and recorded for 3 weeks.

Results

Average age is 64.46 years (min: 22 - max: 86; SD: 14.612), 56% (n = 28) are women, 64% (n = 32) are married, 82% (n = 41) have PSQI score ≥5, 60% were found to have 30 minutes weekly average sleep duration during haemodialysis sessions. Statistically significant difference was found between the overall GDI scores and overall PUK scores of the patients ($p < 0.05$).

Conclusion/Application to practice

PUK scores of patients increase with increasing GDI scores. Good dialysis adequacy improves the sleep quality of patients.

Disclosure: No conflict of interest declared

O-P 05

Health gains in long-term nocturnal haemodialysis

P. Ramires[1], T. Ramires[1], F. Moreira[1], J. Bernardo[1], F. Ambrosio[1], J. Fazendeiro Matos[2]

[1]NephroCare Barreiro, Fresenius Medical Care, Barreiro, Portugal; [2]NephroCare Portugal, Fresenius Medical Care, Porto, Portugal

Background

Long-term nocturnal haemodialysis (LTNHD) was implemented in our centre since 2011, not only in response to the need for a well-tolerated, efficient and accessible treatment, but also by promoting an increase in Quality of Life (QoL).

Objectives

To assess the QoL and health gains of LTNHD patients as compared to a control group (group of patients in a standard day shift). LTNHD patients' satisfaction with the programme.

Methods

Descriptive, quantitative, retrospective, transverse, exploratory study. The Kidney Disease Quality of Life (KDQOL-SF) scale was applied to evaluate the QoL. Data of the sample and control group were collected in a clinical database by means of non-probabilistic sampling.

Results

Twelve people with a mean age of (48±12years) and a mean haemodialysis history of 10±7years and 3±2 years on LTNHD were studied. The increase in mean treatment time (≈+120minutes/session) and decrease in mean blood flow (≈-88mL/min) resulted in reduced fatigue (91.7%), increased dialytic efficacy (Kt/V>2) and a satisfaction rate of 100%. A better control of serum phosphorus levels (5±1 vs 4±1mmol/L) was observed, with no change in the number of phosphorus binders administered, with less diet restrictions (66.7%). The increased daytime leisure in LTNHD patients (up to 91.7%) results in a higher QoL of 88.4% versus 74.1% in a day shift.

Conclusion/Application to practice

The health gains of our LTNHD patients resulted in a higher dialysis efficiency, better control of phosphorus serum levels with a less restrictive diet, less fatigue, more daytime leisure, and potential improvement of relationships, as well as an increase in QoL.

Disclosure: No conflict of interest declared

S 05 Parallel Session
Cannulation Technique
Auditorium Hall, 11:00-12:30

GUEST SPEAKER

Vascular access ultrasound in nursing practice. Concepts and usefulness

R. Iglesias Sanjuan

Vascular access for haemodialysis is the keypoint of the therapy. Complications related to vascular access are the main cause of admission in HD patients. This complications can cause deterioration of patient's quality of life and represent the highest resources consumption. Regarding to native AVFs, it has to be reminded that have higher survival, lower rate of infections, lower costs and gives patients a better quality of life. To reach indicators that guides recommend is essential to work as a multidisciplinary team with vascular surgeons, radiologists, nephrologists and nephrology nurses. All of the use the ultrasound for they daily practice, and why nephrology nurses not?
I'll will explain what we have to know to use the ultrasound. We will see which resources has nephrology nurses for vascular access management.
For what can we use the ultrasound? It can be used for:

- "Instrumented" ultrasound guided puncture
- Ultrasound directed puncture for:
    - 1st puncture (maturation criteria)
    - Complex non pathological AVF and or anatomical abnormality
    - Pathological AVF puncture
- Pathology screening
- Puncture technique choice
- Flow monitoring

Of each one I'll show practical cases with videos and pictures.

O 02

Two cannulation techniques in a single arteriovenous fistula. Why not?

C. Soares[1], R. Sousa[1], J. Peixoto[1], F. Vieira[1], J. Fazendeiro Matos[2]

[1]NephroCare Braga, Fresenius Medical Care, Braga, Portugal; [2]NephroCare Portugal, Fresenius Medical Care, Porto, Portugal

Background

The proper choice of cannulation technique is fundamental for vascular access (VA) survival. At our clinic we currently use the buttonhole technique in patients who have short and/or tortuous cannulation area. The Multi Single Puncture Technique (MuST) gained more acceptance in our clinics, because it obviously reduces infection rates and complications as compared to other cannulation techniques.

Objectives

To demonstrate the possibility of using two different cannulation techniques in patients with arteriovenous fistula (AVF).

Methods

This is a case study of a 60 years old woman with a HD history of 3 years and a radio-cephalic AVF created 3 years ago. At first, she was cannulated using MuST. Data were collected from clinic databases.

Results

Due to a poor development of the cannulation area, we decided to use the buttonhole technique on the venous side, and MuST on the arterial side. We have not yet experienced any difficulties in cannulation and simultaneous use of both techniques for 2 years without the need of intervention in the AVF. The patient is very satisfied and comfortable with her AVF.

Conclusion/Application to practice

The cannulation technique should be selected in accordance with the characteristics of the VA. In this case, the option of using two different cannulation techniques was shown to be effective. As in all fields of nursing, also in the particular aspect of the use and preservation of VA for haemodialysis, care should be tailored to individual patient circumstances.

Disclosure: No conflict of interest declared

O 03

Does the time of first cannulation influence the occurrence of early complications?

V. Romao[1], M. Duarte[1], C. Goncalves[1], F. Gomes[1], B. Pinto[2], R. Peralta[2], J. Fazendeiro Matos[2]

[1]NephroCare VFXira, Fresenius Medical Care, VFXira, Portugal; [2]NephroCare Portugal, Fresenius Medical Care, Porto, Portugal

Background

The Vascular Access's (VA) maturation time is usually defined as 6 weeks for the Arteriovenous Fistulae (AVF) and 4 weeks for the Arteriovenous Grafts (AVG).
In some cases, these periods may not be kept due to increasing longevity of haemodialysis patients and comorbidities like cardiovascular disease and diabetes.

Objectives

To assess how the first cannulation procedures influence the VA's patency and the occurrence of complications after 3 months.

Methods

We conducted a retrospective observational study analyzing VA incidents from 10/2012 to 09/2015. VA maturation was defined as the period from the creation until the first cannulation.
In the first 3 months after the first cannulation, complications and the influence on the patency of the VA were analyzed. An early cannulation was defined as a cannulation before the recommended maturation period.

Results

We analyzed 81 VA with 55 AVF (68%) of which 19 (23.5%) were without complications.
Early cannulation was performed in 19 AVG (8 of those without complications).
Cannulation at the recommended time was performed in 7 AVG (2 without complications) and 55 AVF (9 without complications).
In both types of VA, we observed 0.9 complications/month on average.
On average, the number of complications was identical in both access types.
Additional cannulating and hematoma are the most frequent complications in AVF and thrombosis is the most frequent in AVG, respectively.

Conclusion/Application to practice

In our study, early cannulation of accesses (a short maturation period) did not lead to a higher early complication rate.

Disclosure: No conflict of interest declared

O-P 06

Effectiveness, safety and haemodynamic assessment of neuromuscular electrostimulation in radiocephalic fistula maturation

S. Rubio[1], P. Estruga[1], L. Martínez Carnovale[1], V. Esteve[1], Y. Fernández[1], M. Ramirez de Arellano[1]

[1]Functional Unit Vascular Access (FUVA). Nephrology and Vascular Surgery Department, Terrassa (Barcelona), Spain

Background

Radio- Cephalic fistula (RCAVF) is the gold standar vascular access for the end-stage chronic kidney disease patients. Scarce results regarding neuromuscular electrostimulation (NMES) in RCAVF matuiration and hemodynamic assessment have been reported.

Objectives

To assess the effectiveness, safety and hemodynamic assessment on RCAVF previously matured with a NMES programme.

Methods

An 8 weeks single- centre prospective study in RCAVF previously matured with a NMES programme. Clinical an Doppler Ultrasound (DUS) maturation, haemodynamic data (SBP; DBP; PP;HR) and medical or surgical RCAVF complications were analysed.

Results

11 patients. 82% men. Mean age 65.4 ± 19.2 years. 82% RCAVF left sided. MeaN Charlson Index: 8.7 ± 3.9. 36% DM. 100% Clinical and 82% DUS maturation was achieved. Haemodynamic data (blood pressure, heart rate): 528 measurements. No significant changes in haemodynamic data (SBP 135.9 ± 22.1 VS 134.9 ±21.8 mmHg; DBP 73.4 ±17.4 v s 73.2 ± 16.5 mmHg; PP 62.5 ± 9.2 vs 61.7 ±10.9 mmHg, HR 70.6 ±12.9 vs 71.2 ± 12.5 bpm) were observed at the end of the study. RCAVF complications: 27.3 % hematoma and 36.4 % puncture needle's cannulation disorders. No symptomatic hypotensive events were reported. However, no relevant changes in antihypertensive treatment, dry weight, ultrafiltration rate and HD adecuacy parameters were observed.

Conclusion/Application to practice

A formely NMES programme is a safe, well tolerated and effective technique to assess RCAVF maturation process in our patients. Nevertheless, further studies are required to confirm the potential effect of NMES in the vascualr access maturation process.

Disclosure: No conflict of interest declared

O-P 07

Haemodialysis plastic cannulae seem to be an optimal choice for some patients

R. Sousa[1], P. Goncalves[1], J. Melo[1], S. Campos[1], A. Silva[1], R. Peralta[2], J. Fazendeiro Matos[2]

[1]NephroCare Viseu, Fresenius Medical Care, Viseu, Portugal; [2]NephroCare Portugal, Fresenius Medical Care, Porto, Portugal

Background

Plastic cannulas have been used successfully in Japan for over 20 years to access arteriovenous fistulae (AVF) in haemodialysis patients. The main advantage seems to be the reduced risk of internal vessel wall damage. The main obstacle appears to be the increased costs as compared to metal needles.

Objectives

To demonstrate that plastic cannulae can be an alternative to metal needles for cannulation of AVF in patients with metal allergy.

Methods

This is a case study of a 34 old female patient with metal allergy. After the first allergic signs were detected, we implemented cannulation with 14G plastic cannulae. Allergic signs and pain perception were assessed.

Results

After the first allergy signs were observed, the cannulation technique was changed from the buttonhole with blunt metal needles to the rope-ladder using a 14G plastic cannula. Skin reactions disappeared after one week and after two months, dialysis outcomes improved, especially blood flow, Kt/V and substitution volume. Pain perception decreased from 5 with the buttonhole technique to 1 with the rope-ladder technique using plastic cannulae.

Conclusion/Application to practice

Plastic cannulae are an alternative to cannulate AVFs providing a successful cannulation technique over time requiring a certain degree of expertise and training of the clinical staff. However, plastic cannulae are not user-friendly and still require certain improvements from medical device companies. Perhaps the biggest change in cannulation practices to date is the introduction of plastic cannulae for haemodialysis.

Disclosure: No conflict of interest declared

O-P 08

Hydration status and vascular access interventions

J. Carvalho[1], M. Duarte[1], C. Goncalves[1], F. Gomes[1], B. Pinto[2], R. Peralta[2], J. Fazendeiro Matos[2]

[1]NephroCare VFXira, Fresenius Medical Care, VFXira, Portugal; [2]NephroCare Portugal, Fresenius Medical Care, Porto, Portugal

Background

The hydration status of haemodialysis patients influences blood pressure (BP) values, which may influence the hemodynamic status and the dynamics and morbidity of the vascular access (VA).

Objectives

Assess if the hydration status influences BP and ischemic and thrombotic events of VA.

Methods

Retrospective, observational study. Parameters assessed from 11/2012 until 10/2016 on a monthly basis:

- Hydration status in all patients divided into 3 groups:
  - Overhydrated (OH): relative OH (RelOH) >15% in men, >13% in women;
  - Normohydrated (NH): RelOH 0-15% in men and 0-13% in women;
  - Underhydrated (UH): RelOH <0% in men and women
- VA interventions for the following causes: decrease of vascular access flow (Qa), ischemia, and thrombosis.
- Mean BP of the 3 groups.

Results

2.7% of interventions in the OH and NH group and 2.9% in the UH group were caused by a Qa decrease and ischemia.

0.8% of interventions in the OH group, 1.1% in the NH group and 1.9% in the UH group were related to thrombosis.

The mean systolic and diastolic BP (mmHg) values of the groups were:

- OH: 144.79(±24.96) and 64.57(±14.84);
- NH: 143.98(±22.69) and 66.93(±14.75);
- UH: 141.45(±19.41) and 72.3(±13.80).

Differences between BP means were statistically significant for the diastolic (p<0.005), but not for the systolic values (p>0.005).

Conclusion/Application to practice

In our patients, the mean diastolic blood pressure (p<0.005) and percentage of VA thrombosis events progressively increased from the OH to the UH group.

UH patients showed a slight increase in the percentage of interventions caused by Qa decrease and ischemia.

Disclosure: No conflict of interest declared

O-P 09

Results of a vascular access quality programme

P. Cale[1], S. Dinis[1], C. Marchao[1], J. Sequeira Andrade[1], J. Fazendeiro Matos[2]

[1]NephroCare Entroncamento, Fresenius Medical Care, Entroncamento, Portugal; [2]NephroCare Portugal, Fresenius Medical Care, Porto, Portugal

Background

The loss of vascular access (VA) is a major problem in haemodialysis and may be the result of certain complications. The quality and longevity of VA depend on the identification and early resolution of these complications.

Objectives

To promote the importance of our VA quality programme. To compare our data of VA complications and interventions before and after the implementation of this programme.

Methods

In this observational retrospective study we analysed and compared complications and interventions in 261 patients with a VA under chronic haemodiafiltration (HDF) in 2014 and 2016, respectively, before and after the implementation of our VA quality programme. Complications and interventions rates were calculated per 1,000 VA days.

Results

Some patients had more than one VA in both years.

In 2014 we had:

- 137 patients;
- 96 patients with AVF, 22 with AVG and 33 with CVC;
- 0.49 complications/patient and 0.35 interventions/patient with AVF;
- 2.14 complications/patient and 1.39 interventions/patient with AVG;
- 0.58 complications/patient and 0.36 interventions/patient with CVC.

In 2016 we had:

- 124 patients;
- 87 patients with AVF, 30 with AVG and 23 with CVC;
- 0.57 complications/patient and 0.52 interventions/patient with AVF;
- 1.1 complications/patient and 1.76 interventions/patient with AVG;
- 1.35 complications/patient and 1.43 interventions/patient with CVC.

Conclusion/Application to practice

The VA quality programme led to an increase in interventions, thus preventing complications. These results can be attributed to the daily surveillance and monitoring by the vascular access team in order to increase life expectancy of vascular accesses, leading to the improvement of the quality of life of our patients.

Disclosure: No conflict of interest declared

S 06 Parallel Session
Safety and risk management in Dialysis
Theatre Hall, 11:00-12:30

GUEST SPEAKER

Quality and safety tools in dialysis practice

V. G. Gonçalves[1]
[1]Instituto Português de Oncologia Francisco Gentil, Lisboa, Portugal

Background

"Every system is perfectly designed to achieve the results it gets" (Berwick). However mistakes happen and their impact can be significant.
Health organizations arrange them self's regarding to the patients needs, using the opportunities to improve their care settings.
A safety culture needs to be developed regarding the patient safety needs. All the efforts must insure that the culture includes an error preoccupation regarding the opportunity of knowledge, the ability of innovation and adaptation, a persistent strategic orientation so that everyone can learn with the error. All the efforts contribute to the grown of highly reliable organizations.
A lot of tools are available, but the quality department regarding to the patient safety and patient goals develop a risk management department to analyse all the problems identified and the potential ones. The tools that can minimize the risk can include the identification and the evaluation of the risk regarding a pre-existing or not of a system of incident report, internal quality audits, clinical indicators monitoring, professional formation and the implementation of national and international programs.
Internal preoccupations centre the attention to the patient needs regarding to is safety, equity and the efficiency of procedures. The main goal of all health care systems is to minimize the incidents and their impact and at the same time maximized the recovery from the adverse events.

Disclosure: No conflict of interest declared

O 04

Preparing 42 satellite dialysis units for their Care Quality Commission regulatory inspection

C. Poole[1], N. Beddows[1], S. Tudge[1], D. Crisp[1]

[1]NephroCare Head Office, Fresenius Medical Care, Birmingham, United Kingdom

Background

Delivery of satellite dialysis care in the UK must comply with the following regulations; the Health and Social Care Act 2008 (Regulated Activities) Regulations 2014 (Part 3) and the Care Quality Commission (Registration) Regulations 2009 (Part 4). Inspection for compliance with these regulations is undertaken by the Care Quality Commission (CQC). At the end of 2016 we were notified that 42 of our dialysis units would be inspected during 2017.

Objectives

Assist in the collation of evidence to demonstrate compliance.
Provide key CQC reference documents for units.
Emphasise the CQC approach through their key lines of enquiry (KLOE's) and how they engage with staff/patients during the inspections.

Methods

Delivery of an interactive study day where attendees were actively engaged in group work to identify what evidence they could provide to meet the KLOE's. They were armed with a comprehensive CQC reference document folder, a folder to take back to their units to collate their evidence, a template to tailor to their individual units and clear actions.

Results

100% (N=49) of the dialysis units were represented at the study day. Evaluation of the study day using nine evaluation criteria yielded a 98% positive evaluation. To date all but one unit has submitted their pre-inspection information by the deadline.

Conclusion/Application to practice

Early feedback on this coordinated approach has reminded the staff that they can clearly demonstrate they meet the KLOE's (Safe, effective, caring, responsive & well-led).

Disclosure: No conflict of interest declared

O 05

The effect of needle fixation on the occurrence of acute access complications

C. Miriunis[1], M.T. Parisotto[1], F. Pelliccia[1]

[1]Care Value Management, Fresenius Medical care, Bad Homburg, Germany

Background

The insertion of two needles into the haemodialysis vascular access (VA) is a basic nursing activity. Considering that this activity has to be repeated approximately 156 times/year, reveals its importance in the medium/long-term maintenance of the VA. Cannulation is an essential skill of dialysis nurses: failure to correctly perform this activity may result in serious complications which could, in turn, affect the survival of the VA.

Objectives

To investigate the occurrence of acute access complications with different methods of arteriovenous fistula (AVF) and graft (AVG) needle fixation.

Methods

In April 2009, we conducted a survey in 171 clinics with 10,807 patients about various methods of needle fixation and the occurrence of acute complications.

Results

Out of all observed cannulation procedures, 367 were associated with complications, with the need for multiple–cannulation being the most frequent (33.8%). In terms of needle fixation, no statistical differences were observed between Butterfly versus Chevron and U-shape (used in 28.5%) models, but only for “other” that a second investigation revealed to be a modification of the U-shape which could be defined as the V-shape methods (OR 0.561 - p=0.018).

Conclusion/Application to practice

The procedure to secure needles and blood lines is very important to prevent needle dislodgment. Our study revealed a significantly lower odds ratio for the V-shape as compared to the Butterfly technique. Fixation using the U - or V-shape technique may be beneficial in avoiding acute cannulation infiltration. However, further investigations are required for specific conclusions.

Disclosure: No conflict of interest declared

O-P 10

Emergency and massive disaster management in dialysis units during the procedure of haemodialysis

D. Kitsouli[1], A. Lioka[1], H. Lazaridis[1], A. Gkastari[1], E. Kiroglou[1]

[1]Nephrology Department, G.H. Papageorgiou, Thessaloniki, Greece

Background

In the last decades emergencies have dramatically increased both in the natural environment and in Medical Units. A consequence of the above is the development and application of action plans with the aim of handling such situations worldwide, according to several international standards. Furthermore, the other departments of the Unit should plan in advance, design and organize an action plan for an emergency such as fire, earthquake etc.;

Objectives

The designation of all those parameters which must regulate the Artificial Kidney Unit and the Healthcare staff during the management of emergency situations. Following this, it is proposed to develop a model of response in case of a fire incident and/ or an earthquake, in accordance with the international standards which include the training of the patients and their active participation.

Methods

Bibliographical Review, clinical observations and adjustments of the existing emergency plans on the particularities of an Artificial-Kidney Unit and its patients.

Results

The creation of an action plan that ensures the co-ordination of nurses and patients to work as a team in an emergency situation. The education of patients in the disconnecting method “clamp and cut” The action plan to confront a fire includes a 4-step process and for an earthquake includes a 5-step process.

Conclusion/Application to practice

Every nurse will know how to intervene, what is her/his role, with whom she/he is going to collaborate, who is the coordinator, who will make the decision and which steps will follow. The emergency case stops to be an emergency when you prepared for it.

Disclosure: No conflict of interest declared

O-P 11

Nurse in the dialysis unit. Fatigue and occupational exposure

A. Trzcińska[1], **A. Kliś**[2]

[1]PNNA, PNA, Medical University of Silesia, Katowice, Poland; [2]PNNA, Bielsko Biała, Poland

Background

Nursing is a profession which in Poland is not well respected. Nurses in Poland earn very little. Most Polish nephrology nurses work in several dialysis settings. Nurses work up to 400 hours each month. This means that nurses are very tired and make mistakes.

Objectives

We conducted a survey of 200 nurses. We checked whether there was professional exposure. We asked nurses how many hours they work a month. We asked whether they are tired.

Methods

We conducted a survey. We asked nurses:
- How many hours do you work in a month?
- Do you feel tired?
- Does fatigue bother you at work? Do you make mistakes?
- How does work affect your health and family life?

Results

Nurses are frequently hurt by sharp tools on dialysis units. Nurses are very tired. They are often burned. Their workload is too heavy and this affects how well they work. 86% of nurses make mistakes because they are overtired.

Conclusion/Application to practice

Excedingly low wages force nurses to undertake additional work. Additional work causes additional fatigue. Safe nurse = safe patient. Improving the working conditions of nurses would improve the quality of care too.

Disclosure: No conflict of interest declared

O-P 12

Electrical safety on a haemodialysis (HD) ward

M. Roden[1], L. Vonckx[1], N. Van Paesschen[1], C. Tielemans[1]
[1]Haemodialysis Department, UZ Brussel Hospital, Brussel, Belgium

Background

Electro Static Discharge can lead to life threatening situations for patients and staff. In the early 70's at least 1000 cases per year of micro-shocks in hospitals were counted. Safety measurements changed but the risk still remaines.
Leakage currents can occur from voltage differences between touchable conductive parts and the patient if electro medical devices and locations are inadequately protected.
Leakage currents can also occur, particularly in a dialysis machine, because these don't have a mains protection transformer inside. The conductive composition of the dialysis liquid can allow a current to flow from or to the machine if a difference in electrical potential occurs. Leakage currents can cause major medical problems as tingling, pain, breathing difficulties or even ventricular fibrillation.

Objectives

So, it is important to keep this invisible, inaudible and often not perceptible spark under control. To do that, all our treatment locations are electrically classified Group 2 (IEC 60364-7-710) and all medical equipment is checked for leakage current hazards.

Methods

To prevent leakage currents, it is the doctors' responsibility and the nurses' duty to control the connection and state of these potential equalization yellow/green and mains cables of beds, haemodialysis machines and other equipment.
The technicians and reference nurses of our unit continuously try to implement this control habit to all the new doctors, nurses and logistical assistance personnel.

Conclusion/Application to practice

Only with regularly monitored equipment and installations, dialysis is considered to be a relatively safe procedure as far as electrical hazards are concerned.

Disclosure: No conflict of interest declared

O-P 13

Needleless system for dialysis central vein catheter treatment - for patient and staff safety

A. Yanovsky[1], T. Bernshtein[1], L. Michaelashvili[1], L. Shwarz[1]

[1]Nephrology, Soroka university medical center, Beer-Sheva, Israel

Background

Central venous catheters (CVC) remain in wide use as a vascular access in elderly haemodialysis patients. Central line related blood stream infection (CLABSI) is one of the most common fatal complications among haemodialysis patients.

The practice that was used in our hospital-based unit includes caps on catheter's hubs with lock solution injected through.

Objectives

In order to prevent needlestick injury during injection, a needleless luer-lock device was introduced. Essential functions the needleless system has to meet: blood flow minimum 300 ml/min, prevention of venous pressure or collapse, avoidance of catheter occlusion. After several attempts to apply the most appropriate device, the split septum device was chosen. Bacterial-safety was investigated in addition to the incidence of needlestick injury.

Methods

CLABSI was evaluated 24 months before (1st period) and 24 months after (2nd period) needleless was introduced into our haemodialysis unit.

Results

In December 2016, in our hospital-based unit, 61% of patients were treated with CVCs; average age 65.4 (17-91).

24 months before needleless, 16 CLABSI events were reported (9 gram positive and 7 gram negative) in 101 patients (0.77/1,000 catheter days); 24 months with needleless 10 CLABSI events (5 gram positive and 5 gram negative) in 151 patients (0.44/1,000 catheter days).

Since needleless lock device was introduced, no staff reported needlestick injuries.

Conclusion/Application to practice

The change in practice not only promoted staff safety but also provided a reduction in CLABSI rate.

Disclosure: No conflict of interest declared

S 07 Parallel Session
Multimorbidity in renal care
Chamber Hall, 11:00-12:30

GUEST SPEAKER

Evolution of morbidity: what we learn from 30 years registration of 'dialysis practice' in Flanders

P. Van Malderen

The patient population with a renal function replacement therapy today, represents a large group of patients with a significantly increased "morbidity – co-morbidity problem". Care for these patients has become more complex and requires a wider focus than simply performing and following the treatment.

Since 1988 the Flemish dialysis and transplant nurses' organization, ORPADT, has charted the nephrological care practice in Flanders through a 3-year survey. The query focuses on a multidisciplinary approach to the numerous facets of our professional practice and allows us to analyze evolutions of the patient on different medical, nursing, organizational aspects. Each center can compare its own practice data with the data of the other centers and questions its own quality of care.

From this unique data collection, I want to outline you how the patient population, the morbidity and the patient care evolved and how we organize and fulfill our care services in Flanders today.

O 06

Does haemodiafiltration with high convection volume affect health related quality of life?

E. Golland[1], O. Tanhilevsky[1], R. Geron[1], B. Kristal[1]

[1]Haemodialysis Unit, Galilee Medical Center, Naharia, Israel

Background

Hemodiafiltration has been proved to reduce mortality rates and cardiovascular morbidity among dialysis patients when a high convection volume was achieved. However, the effect of this dialysis method method on quality of life (QoL) is unclear.

Objectives

To examine whether the transition from standard haemodialysis using high-flux membranes, to haemodiafiltration with high convection volume can explain an improvement in patients' QoL and hemodynamic stability.

Methods

The convenience sample was initially 45 patients, with 34 completing the study. The first assessment of QoL was at 12 weeks of dialysis with an HF membrane and this was considered the baseline assessment. The additional assessments were at 24 weeks of haemodialysis with HF membranes and then after 24 weeks of Haemodiafiltration. QoL was assessed using the KDQOL—SF. Data regarding hemodynamic stability were collected during each treatment period.

Results

QoL was significantly higher during the HDF period compared to the HF haemodialysis period for 8 subscale: symptom list $F(2,66)=5 p<0.05$, kidney disease influence $F(2,66)=7.58 p<0.05$, quality of social interaction $F(2,66)=3.58 p<0.05$; overall health $F(2,66)=3.18 p<0.05$; physical functioning $F(2,66)=4.62 p<0.05$; physical role $F(2,66)=7.36 p<0.05$; emotional role $F(2,66)=4.9 p<0.05$ and physical health composite $F(2,66)=4.62 p<0.05$. The number of hypovolemic events decreased during HDF($Z=-3.89, p<0.001$). Higher convection volume was associated with fewer hypovolemic events during HDF treatment ($r_s=-0.3 p<0.05$) and an improvement on the physical functioning subscale ($r_p=0.37 p<0.05$).

Conclusion/Application to practice

The findings show that HDF is associated with a better QoL when high convection volumes are achieved. Additional studies with larger sample sizes and randomized design are required for a better understanding of the mechanisms by which HDF dialysis is related to the improvement in patients' QoL.

Disclosure: No conflict of interest declared

O 07

Secondary hyperparathyroidism treatment in chronic kidney disease patients on haemodialysis

I. Boldeiu[1]

[1]Fresenius, Bucuresti, Romania

Background

Secondary hyperparathyroidism (SHPT) is one of the most important complications in chronic kidney disease (CKD) patients on haemodialysis with a significant impact on the bone and cardiovascular morbidity. Calcimimetic therapy has improved the biological, clinical and histopathological parameters of haemodialysis patients, thus reducing the percentage of surgery involving the parathyroid gland.

Objectives

To reduce the serum level of intact plasma (iPTH) to target values (150-300pg/ml) in dialysed patients with SHPT by prevention of adynamic bone disease (iPTH <100pg/ml).

Methods

We investigated 17 patients with iPTH ≥ 800pg/ml, without parathyroid nodules as confirmed by ultrasound, under calcimimetic therapy for 12 months. Monthly blood samples were taken to determine the patients' iPTH levels, calcium, and phosphorus serum levels. The calcimimetic was initiated at 30 mg/day and subsequently adapted depending on the iPTH values. The dialysis solution used was based on a physiological calcium concentration of 1.5 mmol/l.

Results

All patients complied with the treatment. After 12 months, the iPTH level decreased to the target values in 8 patients (47%). The respective iPTH values were reduced by 42-93%. In 9 patients (53%), the PTH values decreased by 23-63% but did not reach the target values.

Symptomatic hypocalcemia, as a possible adverse reaction, was not observed. The gastric pain was reported in one patient, but it ceased after dividing the daily dose.

Conclusion/Application to practice

Calcimimetics might be a good therapeutic option in moderate and/or severe SHPT and might reduce the risk of vascular calcification, CKD-associated bone disease, and death of haemodialysis patients.

Disclosure: No conflict of interest declared

O-P 14

VND – a common adverse occurrence?

M. Krupińska[1], B. Kokowska[2]

[1]B. Braun Avitum Poland Stacja Dializ, Golub-Dobrzyń, Poland; [2]B. Braun Avitum Poland Stacja Dializ, Brodnica, Poland

Background

VND is a dangerous occurrence to patients, it may threaten their health or even life. It should never take place.

Objectives

To analyse the occurence of adverse patient events of VNDs among 1,500 patients and 229,500 treatments conducted in 19 DCs within 12 months.

Methods

The study was based on Adverse Patient Occurrence reports of VNDs at the DCs and a detailed analysis of such events. They gave us an insight into the frequency and causes of VNDs.

Results

Altogether 25 VNDs were reported at our DCs in 2016. All of them were quickly discovered preventing adverse effects to the patients. 23 VNDs were observed by a nurse and 2 were reported by a patient. Blood loss was from 0 to 200ml. The occurrences were: 17 VNDs, 5 ANDs, 2 SNDs and 1 AVND. Needle dislodgments occur most often in the second part of dialysis, are usually caused by patients' changing position and patients with cognitive disorders who are agitated and disorientated are threatened the most.

Conclusion/Application to practice

VNDs are not a common occurrence, but they happen.
In the 3-4 hour of treatment patients show signs of tiredness due to constant position in the dialysis chair/bed, they try to change position and forget needles.
Complications such as cramps or hypotonia usually occur in the last hour of the treatment.
VNDs at the beginning of HD were usuallyrelated to a patients' senile dementia.

Disclosure: No conflict of interest declared

O-P 15

Quality of life of haemodialysis patients and complications of CVC and AVF

D. Theodorou[1], A. Papassava[1]

[1]Haemodialysis Department, General Hospital Of Larnaca, Cyprus

Background

The increase in life expectancy, as well as in chronic diseases, has influence on medical interventions, especiellyon continuous care patient.

Objectives

The aim of this work is to imprint the QOL of haemodialysis patients (h.p) treated at Larnaca and Nicosia G.H. and their correlation with demographic characteristics and health information, as well to record and compare the complications of CVC and AA.

Methods

Sample: 193 h.p,
Time: 26/2/2014 - 15/4/2014,
Collection of data:- questionnaire of demographic characteristics and patient health data
- Questionnaire of WHOQOL-BREF – Greek version
- Questionnaire of complications of vascular access
Software SPSS 20 was used for statistical analysis.

Results

The QOL of the majority of h.p is located at a medium level and is lower in comparison to the healthy population (P<0,00). The number of complications in vascular access (P=0,001) affect it negatively. The QOL of h.p with AA appears better in the factor of mental health in relation to h.p with CVC (P=0,008). Patients with CVC present higher percentages in local infections (P<0,001), bacteremia (P<0,001) in comparison to the patients with AA.

Conclusion/Application to practice

The QOL of h.p is at a medium to low level then in healthy population. Providing holistic health care could contribute to an improvement in their QOL. Patients with AA present less complications of vascular access and higher percentages of mental health in relation to the patients with CVC, which is why AA is recommended as first choice of permanent vascular access.

Disclosure: No conflict of interest declared

O-P 16

Managing interdialytic weight gain in chronic kidney disease patients with diabetes

K. Blair[1], L. Baker[2], A.M. Habib[2]

[1]Farnborough Dialysis Unit, Fresenius Medical Care, Farnborough, United Kingdom; [2]Renal Unit, St Helier Hospital, Carshalton, United Kingdom

Background

Review of treatment variance reports indicated that CKD patients with diabetes had an increased incidence of post-dialysis hypotension. Post-dialysis sitting BP was normal or elevated but on standing they experienced symptoms of hypotension. This reflects evidence that diabetic patients develop orthostatic hypotension and have increased problems with fluid management due to a vicious circle of thirst and polydipsia

Objectives

Utilise BP results as a tool to educate patients regarding their inter-dialytic weight gain. Encourage patients to monitor their sitting and standing BP at home, establishing a truer picture of their BP profile. Avoid unnecessary postural hypotensive episodes. Improve the feeling of well-being post dialysis.

Methods

Patient's pre and post-dialysis BP was recorded sitting and standing. Calculation of ultrafiltration was undertaken on an individual basis in alignment with the patients documented standing BP readings. Patients were reviewed in clinic, culminating in adjustment of medication and/or dry weights. Home BP monitoring of results were reviewed.

Results

Initially 5 diabetic patients started on this regime, early indications identified an improvement in post-dialysis BP management, with a reduction in episodes of hypotension. Patients also verbally reported that they felt less tired at home and were not so "shaky and dizzy" post-dialysis. This prompted the unit to implement this in the management of al diabetic patients (N=52) which is 43% of our dialysis unit population

Conclusion/Application to practice

Sitting and standing BP is embedded into practice for all patients who demonstrate hypotension post-dialysis. Staff and patients' knowledge of fluid management has improved.

Disclosure: No conflict of interest declared

O-P 17

An immigrant patient with Down syndrome on haemodialysis treatment for seven years

C. Sayan[1], E. Bulbul[2], M. Gursu[3], M. Pecen[1], Y. Deligoz Bildaci[3], O.C. Elcioglu[3], R. Kazancioglu[3]

[1]Dialysis Unit, Bezmialem Vakif University, Istanbul, Turkey; [2]Health Science Faculty, Nursing Department, Bezmialem Vakif University, Istanbul, Turkey; [3]Nephrology Department, Bezmialem Vakif University, Istanbul, Turkey

Background

Down syndrome (DS) is one of the most common genetic causes of learning disabilities in children. Down syndrome can affect multiple organ systems, although renal disease has been thought to be quite rare. Down syndrome patients are usually not preferred for peritoneal dialysis because of intellectual disability, higher risk of peritonitis caused by difficulties with maintaining personal hygiene and compliance.

Objectives

We report a 43-year-old male patient with Down syndrome with end-stage renal disease on maintenance haemodialysis (HD) for seven years. The etiology of renal disease is unknown. He has no other comorbidities. The HD treatment was started in Syria using a right jugular catheter which was kept until maturation of the arteriovenous fistula.

The patient is not good at taking his drugs such as phosphorus binders and his 12 month phosphorus average is 6.7gr/dL. He is not a high fluid consumer and his ultrafiltration rate is approximately 2.5L/session. His blood pressure level is well regulated. His albumin and hemoglobin levels are within target levels and the Kt/V is 1.69average.

Conclusion/Application to practice

In conclusion, we have not encountered any similar patients who have had dialysis treatment over such a long period of time. The patient has intellectual difficulties so behavioral changes, depression or anxiety are observed. Managing a patent with DS can sometimes be difficult but can be performed successfully. However, family support is mandatory regarding dietary regulations and compliance to prescriptions.

Disclosure: No conflict of interest declared

S 08 Lunch Symposium-DOPPS Clinical Symposium
The DOPPS Program Continues to Grow
Theatre Hall, 12:45-13:45

EDTNA 2017 Congress, Krakow Poland

Date: Sunday, 10 September 2017
Time: 12:45-13:45
Location: Theatre Hall

DOPPS Clinical Symposium Program

SYMPOSIUM TITLE:

The DOPPS Program Continues to Grow

Chairpersons: Anna Marti Monros & Andrzej Więcek

Key haemodialysis practice changes and their impact ..... Andrzej Więcek

PDOPPS: Identifying optimal practices in PD ..... Jen King

CKDopps: Improving outcomes in advanced CKD and the transition to dialysis ..... Elodie Speyer

"Ask your patients and do something about it": The patient perspective in DOPPS..... Jeanette Wallin

Panel Discussion ..... All speakers and audience

All presentations will have a practical clinical focus. A brief discussion will follow each presentation and a panel discussion with all speakers and chairpersons will end the symposium.

This Symposium will focus on new findings provided by the DOPPS regarding modifiable haemodialysis practices. The program will highlight evidence-based opportunities for improving clinical management of haemodialysis patients. The international panel of speakers will present several clinically relevant practice areas, with emphasis given to the international perspectives of DOPPS. Dialogue between the panelists and audience is encouraged during the Panel Discussion in the closing minutes of the program.

S 09 Lunch Symposium-Greek Masterclass (Session in Greek language) Chamber Hall, 12:45-13:45

Cardiovascular disease in patients with CKD. The Nephrologist's role

E. Dounousi[1]
[1]Nephrology, University Hospital, Ioannina, Greece

Background

Cardiovascular disease (CVD) is the main cause of death among CKD patients. As renal function declines, kidney-specific risk factors for cardiovascular events emerge. The spectrum of CVD in this population extends from arterial vascular disease to left ventricular hypertrophy and dilation with subsequent heart failure, with non-atherosclerotic cardiovascular disease becoming dominant at more advanced CKD. Main culprits related to cardiovascular risk in patients with CKD include renin–angiotensin system and sympathetic overactivity, endothelial dysfunction, chronic inflammation, metabolic bone disorder and oxidative stress. Uremia-related as well as renal replacement modality associated factors emerge in patients who initiate renal replacement therapy. Kidney transplant recipients have a lower risk of CVD compared with dialysis patients but still higher compared with the general population.

Objectives

The nephrologist's role, as part of the renal unit multidisciplinary team and in close co-operation with a cardiologist is of paramount importance in order to reduce cardiovascular morbidity/mortality in CKD patients. Nephrologist's action should start early in the course of CKD by recognizing high risk patients and preventing the occurrence of CVD by multifactorial interventions against established cardiovascular risk factors. Both lifestyle modification as well as pharmacological treatment against traditional and uremia-related risk factors can play a synergistic role in CVD prevention in patients with all CKD stages. Accordingly, in established CVD, Nephrologist in charge should manage aggressively all uremia-dialysis-renal transplant related factors known to exacerbate CVD burden. Shared decisions about therapeutic interventions should be taken based on current guidelines for CVD considering the special features of CKD population.

Disclosure: No conflict of interest declared

Cardiovascular disease in patients with CKD. The Renal Nurse's role

M. Oikonomou[1]
[1]Nephrology, University Hospital, Ioannina, Greece

Background

Cardiovascular Disease (CVD) is a frequent complication of Chronic Kidney Disease (CKD). CVD is the main cause of mortality and hospitalization among CKD patients. Renal nurse, as a member of the Renal Unit Multidisciplinary team, has an important role in the CKD patients' care at the: a) CKD Outpatient Clinic, b) Nephrology Ward, c) Haemodialysis and Peritoneal Dialysis Unit and d)Transplantation Unit.

Objectives

Nursing management of CKD patients should start early by preventing the development of CVD which could delay the progression of CKD. In CKD patients with CVD, the renal nurse is in charge of integral patients' care, both at outpatients' clinics and hospitalization period. Nursing responsibility covers a full range of activities including: patients' education regarding their lifestyle modification, managing the CVD risk factors such as diabetes mellitus, anaemia, dyslipidaemia, hypertension, checking the compliance with prescribed medications and diet. Concerning dialysis patients, the use of nursing protocols as regards control of CVD risk factors namely, avoidance of fluid overload, hemodynamic stability during dialysis sessions, compliance with dietary restrictions and drug therapy is a paramount importance. Appropriate nursing care immediately prior to and following renal transplant contributes to the success of the transplantation and the reduction of the CVD burden. The role of the renal nurse in the psychological aspects is important, due to the change of patients' lifestyle, existing co-morbidity, increased stress.

Conclusion/Application to practice

The care of CKD patients with CVD requires an increased basic knowledge from the nurses who are the cornerstone of the coordinating multidisciplinary care for these patients.

Disclosure: No conflict of interest declared

S 10 Corporate Education Session - Vifor Fresenius Medical Care Renal Pharma Ltd. Auditorium Hall, 14:00-15:30

The Importance of Patient Education and Motivation in the Management of Mineral Bone Disorder – a 360° Degree Approach

Objectives

- To highlight the importance of treating hyperphosphataemia
- To discuss the range of approaches available for hyperphosphataemia management and their associated benefits, risks and limitations, taking into consideration nephrologist, nurse and patient perspectives
- To understand the importance of patient education in optimal management
- To discuss tools and approaches aimed at assisting patient education, highlighting the importance of the multidisciplinary team and the central role of the renal nurse

Methods/Discussion

- Introductory presentations from a patient, nurse and nephrologist
- Interactive panel discussion led by an expert moderator

Program & Speakers

- **The burden of renal disease: The patient perspective**
  Dani Gallego (ALCER, Spain, tbc) (10')
- **Why it matters to control hyperphosphataemia: The nephrologist's view**
  Prof. Dr. med. Helga Frank (Nephrocare, Germany, tbc) (10')
- **Patient education and motivation: The role of the renal nurse**
  Stefaan Claus (Orpadt, Belgium, tbc) (10')
- **Panel discussion**
  All speakers (20')
- **Q&A and Closing Remarks (10')**

S 11 Parallel Session
Improving quality of renal care
Theatre Hall, 14:00-15:30

GUEST SPEAKER

Establishing a clinical phenotype for cachexia in end-stage kidney disease - a study protocol

J. Reid[1], H. Noble[1], G. Adamson[2], A. Davenport[3], K. Farrington[4], D. Fouque[5], K. Kalantar-Zadeh[6], J. Mallett[2], C. Mckeaveney[1], S. Porter[3], D. Seres[7], J. Shields[8], A. Slee[9], M.D. Witham[10], A.P. Maxwell[11]

[1]School of Nursing and Midwifery, Queen's University, Belfast, Belfast, United Kingdom; [2]School of Psychology, Ulster University, Londonderry, United Kingdom; [3]Bournemouth University, Bournemouth, United Kingdom; [4]East and North Hertfordshire University NHS Trust, Stevenage, United Kingdom; [5]University of Lyon, Lyon, France; [6]University of California, California, United Kingdom; [7]Columbia University Medical Centre, Columbia; [8]Regional Nephrology Unit, Belfast City Hospital, Belfast; [9]Division of Food Science, London South Bank University, London; [10]School of Medicine, Ninewells Hospitial, Dundee; [11]School of Medicine, Dentistry and Biomedical Sciences, Queen´s University, Belfast, Belfast

Background

Surveys using traditional measures of nutritional status indicate that muscle wasting is common among persons with end-stage kidney disease (ESKD). Up to 75% of adults undergoing maintenance dialysis show some evidence of muscle wasting. ESKD is associated with an increase in inflammatory cytokines and can result in cachexia, with the loss of muscle and fat stores. At present, only limited data are available on the classification of wasting experienced by persons with ESKD. Individuals with ESKD often exhibit symptoms of anorexia, loss of lean muscle mass and altered energy expenditure. These symptoms are consistent with the syndrome of cachexia observed in other chronic diseases, such as cancer, heart failure, and acquired immune deficiency syndrome.

Objectives

The aim of this study is to determine the clinical phenotype of cachexia specific to individuals with ESKD.

Methods

A longitudinal study which will recruit adult chronic haemodialysis patients attending a Regional Nephrology Unit within the United Kingdom. Patients will be followed 2 monthly over 12 months and measurements of weight, lean muscle mass, muscle strength, fatigue, anorexia and quality of life collected. We will determine if they experience (and to what degree) the known characteristics associated with cachexia.

Conclusion/Application to practice

The importance of developing a definition of cachexia in a population with ESKD is underscored by the negative impact that symptoms of cachexia have on quality of life and the association of cachexia with a substantially increased risk of premature mortality.

Disclosure: No conflict of interest declared

O 08

Can an intradialytic physical exercise programme decrease serum phosphorus levels in haemodialysis patients?

O. Albuquerque[1], R. Camisa[1], A. Seabra[1], J. Fazendeiro Matos[2], M.T. Parisotto[3]

[1]NephroCare Coimbra, Fresenius Medical Care, Coimbra, Portugal; [2]NephroCare Portugal, Fresenius Medical Care, Porto, Portugal; [3]Care Value Management, Fresenius Medical Care, Bad Homburg, Germany

Background

In July 2014, our multidisciplinary healthcare team started an Intradialytic Physical Exercise Programme (IPEP) aiming to increase the functional capacity and quality of life of our patients.
Some studies suggest that exercise programmes can improve several analytic parameters, such as serum phosphorus levels.

Objectives

To evaluate whether 18 months of IPEP can decrease the phosphorus levels in haemodialysis patients.

Methods

This is a quantitative, descriptive, and retrospective study comparing serum phosphorus levels in patients of two groups at same time point, subjected to similar but not controlled variables. The main difference was that group 1 (n=16) underwent an IPEP, whereas group 2 (n=16) did not undergo any training.
Phosphorus levels were measured 1 year before and 1 year after implementation of the 18-months IPEP.

Results

In group 1, mean levels of serum phosphorus decreased from 4.13mg/dL to 4.0mg/dL and from 4.34mg/dL to 4.53mg/dL in group 2, respectively. Both results were statistically not significant (p=0.183; p=0.282). The difference of phosphorus levels after IPEP between the two groups was statistically significant (p=0.022).

Conclusion/Application to practice

The fact that phosphorus levels in group 1 decreased while they increased in group 2 shows that an IPEP might have a positive influence on phosphorus levels. However, further studies with bigger sample sizes and controlled variables, such as nutrition, HD quality, or medication are required to prove this observation.

Disclosure: No conflict of interest declared

O 09

Symptom cluster model for people with advanced stages of chronic kidney disease

H. Almutary[1, 2, 3], A. Bonner[2, 3, 4], D. Douglas[2]

[1]School of Nursing, King Abdulaziz University, JEDDAH, Saudi Arabia; [2]School of Nursing, Queensland University of Technology, Brisbane, Australia; [3]NHMRC CKD Centre of Research Excellence, University of Queensland, Brisbane, Australia; [4]Kidney Health Service, Metro North Hospital and Health Service, Brisbane, Australia

Background

Chronic kidney disease (CKD) is associated with a high symptom burden that often occurs in clusters. Effective symptom management is still challenging, and it is likely due to the lack of understanding about the relationships between the patient characteristics, the symptom experience, and the outcomes. Development of a model that explains these relationships is, therefore, a fundamental step toward effective symptom management.

Objectives

The purpose of this study was to use the Theory of Unpleasant Symptoms (TOUS) as a guide to develop and test a symptom cluster model in CKD patients.

Methods

Structural equation modeling with cross-sectional data was used to test the TOUS. A total of 436 patients with CKD from 3 hospitals completed validated measures of symptom burden and quality of life (QOL). Demographic characteristics were also collected.

Results

The model provides strong evidence for the utility of the TOUS in this population group. The strongest predictor of symptom experience was psychological distress (p<0.001), followed by stages of CKD (p<0.001) and age (p<0.001); together these explained 68% of the variance in symptom experience. Fluid volume symptom cluster, fatigue and sleep disturbance strongly explained overall symptom experience, which then had a strong negative effect on QOL (p <0.001). Overall, the model explained 57% of the deterioration in QOL.

Conclusion/Application to practice

Interventions targeting symptom clusters could greatly improve quality of life in patients with CKD. Importantly the symptom cluster model will serve as a framework to guide further interventional research to reduce symptom burden in CKD.

Disclosure: No conflict of interest declared

O-P 18

The influence of nursing interventions in dialysis patients and organizations outcomes. A framework proposal

T. Carvalho[1], J. Amendoeira[1], J. Fazendeiro Matos[2]

[1]Centro de Acessos Vasculares NephroCare Lisboa, Fresenius Medical Care, Lisboa, Portugal; [2]NephroCare Portugal, Fresenius Medical Care, Porto, Portugal

Background

The literature defines nurse-sensitive patient outcomes as the improvement in the patient's function, status, perception or behaviour resulting from nursing care. The *Nursing Role Effectiveness* conceptual model based on Donabedian's quality of care model, established relationships between different nursing roles in health care and expected outcomes. The model can be applied to investigate variables related with nurse and patient and its influence on nursing performance and consequent impact on patient and organization outcomes.

Objectives

Development of a framework to identify variables to assess quality of nursing care in haemodialysis.

Methods

Literature review regarding nursing outcome assessment and dialysis nursing outcomes.

Results

The definition of the variables related to structure, process and outcomes is important for an evaluation of quality. Structure variables related to nurses: experience, specific competences for patients in critical or/and chronic/palliative situation. Age, gender and co-morbidities are related to patients and Nursing/Patient ratio to health care organization. Process variables: vascular access physical examination, promotion of autonomy and self-care, therapeutic administration and dialysis treatment, promotion of physical exercise, cannulation of vascular access, emotional support in chronic disease and diet and water intake restriction adherence. Outcome variables: the patient dialysis efficiency, Hgb and ESA consumption, quality of life and self-care ability, inter-dialytic weight gain and therapeutic adherence. In the organization, variables related to clinical indicators, costs, professional and patient satisfaction, rate of incidents and infections.

Conclusion/Application to practice

Measuring the influence of nursing intervention in patient and organizations outcomes is an important step to guarantee the quality of health care in dialysis.

Disclosure: No conflict of interest declared

O-P 19

Pain perceptions among dialysis patients and its determinants

A. Mróz[1], K. Golik[1], K. Długoborska[1], I. Rozalska[1], A. Aftyka[1], V. Mianowana[2]

[1]Department of Anaesthesiological and Intensive Care Nursing, Faculty of Health Sciences, Medical University, Lublin, Poland; [2]Chair of Development in Nursing, Faculty of Health Sciences, Medical University, Lublin, Poland

Background

Pain can occur among patients treated BYh dialysis. Pain determines many aspects of human life and impairs the quality of life. Therefore, in the care of patients treated by dialysis we should aim to minimize the pain and eliminate its causes. This procedure is justified from the point of view of managing the renal care, because it helps to improve the quality of life, satisfaction with care by patients and reduces costs associated with hospitalization.

Objectives

The aim of the study was to find the reasons of pain and it's perceptions among daialysis patients.

Methods

Study was conducted using self – administered questionnaire. It included visual – analogue pain scale and questions concerning: subjective experience of depression, acute dialysis complications, character of pain and it's frequency, taking painkillers and it's analgetic results.

Results

The questionnaires were completed by 74 patients treated with haemodialysis (87%) and peritoneal dialysis (13%). Among respondents 65% were men and 35% women, age between 50 – 75 years old. Patients notified many disorders after treatment such as: fatigue, nausea and vomiting, sleep disturbances and diarrhea.According to the study there was a positive relationship between the frequency of pain sensations and its severity, strength pain intensity and pain tolerance, feeling pain and duration of treatment and between patients' pain feeling and their mood ($p < 0,05$). There were no or weak correlation among the variables between: age and perception of pain, the presence of symptoms of depression and pain as well as between sex and perception of pain.

Conclusion/Application to practice

1. There is high frequency of pain among dialysis patients.
2. The most common way of dealing with pain in patients undergoing dialysis should be taking painkillers.
3. Minimizing the pain and eliminating its causes among dialysis patients should become the gold standard in patient care from the point of view of managing the renal care.
4. This study should be continued to look for more nursing skills to reduce pain problems among dialysis patients.

Disclosure: No conflict of interest declared

O-P 20

Agility, mobility and body balance in haemodialysis patients undergoing intradialytic exercise

R. Camisa[1], S. Dinis[1], N. Gomes[1], A. Seabra[1], J. Fazendeiro Matos[2]

[1]NephroCare Coimbra, Fresenius Medical Care, Coimbra, Portugal; [2]NephroCare Portugal, Fresenius Medical Care, Porto, Portugal

Background

Elderly patients with chronic kidney disease (CKD) undergoing haemodialysis have a lower physical function and higher risk of falling than healthy elderly population. A fall can be the first manifestation of physical and functional decline which can lead to an increased morbidity and mortality. Therefore, intradialytic exercise programmes (IEPs) were implemented as an important strategy to improve the patients' body balance and prevent falls.

Objectives

- To assess the influence of IEP on the body balance of CKD patients.
- To compare the test results to standard values of the same age healthy population.

Methods

IEP started 2 years ago with a randomised controlled trial. After 3 months, strength training was initiated. Group-1 with 20 patients still undergoes training and 18 months later another group with 21 patients was established (group-2). Since 2014, data were collected at intervals of 3 months using Up and Go (UpGo) and Sit to Stand (STS) tests. Later, Single Leg Stance (SLS) and Tandem Stance (TS) tests were applied.

Results

Group-1 showed a better performance in STS (mean repetitions: 11.85 to 13.79; p=0.027) vs group-2 (mean repetitions: 10.95 to 12.12; p=0.09). In terms of UpGo, both groups showed a better performance (p=0.002; p=0.001). However, both groups had worse results in SLS and TS as compared to healthy persons at the same age (group-1: 17.28s; group-2: 13.87s and group-1: 19.55s; group-2: 20.71s, respectively).

Conclusion/Application to practice

Our patients can benefit from IEP and improve their quality of life and autonomy. From a holistic view, it also may improve their satisfaction with the dialysis treatment.

Disclosure: No conflict of interest declared

O-P 21

Developing and pilot testing a shared decision-making intervention for dialysis choice

J. Finderup[1], J.K.D. Jensen[1], K. Lomborg[1]

[1]Renal Medicine, Aarhus University Hospital, Aarhus N, Denmark

Background

Evidence is inconclusive in how best to guide the patient when it comes to deciding dialysis modality. International guidelines recommend that patients be involved in the decision making as to which modality would best suit them. Nevertheless studies suggest that many patients are not involved in the decision.

Objectives

To develop and pilot test a form of intervention for shared decision-making.

Methods

This study outlines the first two phases of a complex intervention design. Phase 1: Based on the identification of relevant evidence and theory, and data analysis of 13 patient interviews a manual for shared decision making was developed, including a variety of decision aids. Phase 2: The pilot test included both the inclusion and the feasibility of the validated shared decision-making questionnaire (SDM Q9) applied to evaluate the process.

Results

A total of 137 patients were interviewed. Following the interview, 80 % of the patients chose dialysis at home reflecting an increase by 25 % in home dialysis. The SDM Q9 showed that the majority of the patients experienced the intervention as shared decision-making. A small number of patients made the decision as to which dialysis modality they chose alone.

Conclusion/Application to practice

An intervention based on shared decision-making supported by decision aids seemed to increase the number of patient in home dialysis. The SDM Q was a useful evaluation tool. Further research is needed to gain insight into the patients' experiences of involvement and the implications for their choice of dialysis modality.

Disclosure: No conflict of interest declared

S 12 Parallel Session
Conservative renal care
Auditorium Hall, 16:00-17:30

GUEST SPEAKER

Conservative Care - an equal treatment choice

K. Jenkins

Conservative care for people with End Stage Kidney Disease (ESKD) means not having any form of renal replacement therapy such as dialysis or transplantation. It is not a 'no treatment' option. Often it the patient's personal choice not to have dialysis or transplantation and is usually is an informed decision shared between the patient, Nephrologist and members of the multi-disciplinary team following extensive discussions about the various treatment options available including conservative care. In some cases the Nephrologist may make the decision that dialysis is not a suitable choice or be of benefit due underlying medical conditions and that the conservative care pathway would be more appropriate. Research shows1,2 that older patients with co-existing co-morbidities, do not gain any meaningful benefit from dialysis and benefit more from receiving care that focuses on quality of life. The main goals of conservative care are to: optimize quality of life, preserve residual renal function where appropriate, and best manage symptoms of ESKD without dialysis or transplant. In addition this group of patients are able to access palliative care support earlier thus preventing admission to and dying in an acute hospital setting. Conservative care is an equal treatment choice for those who chose not to have dialysis, or do not have dialysis for medical reasons, with access to exactly the same level of care as those preparing for dialysis for example: management of anaemia, mineral bone disorder, and nutritional assessment. Creating a recognised conservative management programme in every renal unit is key to delivering this type of care. Models of care may vary but the principles remain the same, to a develop person centred service using a whole systems approach involving the patient and their carer, renal teams, primary care doctors (GPs) community nurses and specialist palliative care teams.

References

1 .Reindl-Schwaighofer R, Kainz A, Kammer M, Dumfarth A, Oberbauer R (2017) Survival analysis of conservative vs. dialysis treatment of elderly patients with CKD stage 5. PLoS ONE 12(7):

2.Hussain JA[1], Mooney A, Russon L. Palliat Med. 2013 Oct;27(9):829-39 Comparison of survival analysis and palliative care involvement in patients aged over 70 years choosing conservative management or renal replacement therapy in advanced chronic kidney disease

O 10

A randomised controlled trial of OPTIONS for older patients with advanced kidney disease

L. Brown[1, 2, 1], G. Gardner[2], A. Bonner[2, 3, 4]

[1]Renal, Wide Hospital and Health Service, Hervey Bay, Australia; [2]School of Nursing, Queensland University of Technology, Brisbane, Australia; [3]NHMRC CKD Centre of Research Excellence, University of Queensland, Brisbane, Australia; [4]Kidney Health Service, Metro North Hospital and Health Services, Brisbane, Australia

Background

A decision support intervention (DSI) enables the presentation of evidence-based information to patients in a simple unbiased manner to assist them to identify their values and to clarify their wishes. It is useful when there is there is no single best choice.

Objectives

To determine the effectiveness of a DSI for older patients with advanced kidney disease when making a treatment choice.

Methods

Using a pragmatic randomized controlled trial to compare the effectiveness of DSI with standard care in lowering decision conflict and decision regret. Inclusion criteria: age ≥ 70 years, eGFR <20mL/min/m^2 and cognitively intact. The DSI (OPTIONS) was developed according to the Ottawa Decision Support Framework. A systematic review was undertaken to inform the evidence-based information. The intervention group received OPTIONS during their usual renal outpatient appointment with a nurse. Study outcomes were decision conflict (measured at 1 and 3 months [if no decision was made]) and decision regret (measured at 1 and 3 months).

Results

Forty-one participants were randomly assigned to receive either OPTIONS (n=19) or standard care (n=22). The mean age was 78 years. There was no difference in decision conflict (20.32% versus 15.95%, p=0.53) or decision regret (intervention increasing predicted mean value by only 0.73, p=0.64) between the intervention and standard care groups respectively. Of significance, the intervention group had greater uncertainty initially (p=0.047-1 month).

Conclusion/Application to practice

Although this study was underpowered, OPTIONS assisted patients in the intervention group to be more certain about the decision that they had made. Further research of OPTIONS is required.

Disclosure: No conflict of interest declared

O 11

Integrating renal and palliative care to support patients nearing end of life

A. Bonner[1, 2, 3], L. Purtell[1, 3, 2], H. Healy[2, 3], I. Berquier[2], C. Douglas[4], W. E. Hoy[3, 5]

[1]School of Nursing, Queensland University of Technology, Brisbane, Australia; [2]Kidney Health Service, Metro North Hospital and Health Service, Brisbane, Australia; [3]NHMRC CKD Centre of Research Excellence, University of Queensland, Brisbane, Australia; [4]Palliative and Supportive Care Services, Royal Brisbane and Women's Hospital, Brisbane, Australia

[5]Centre for Chronic Disease, University of Queensland, Brisbane, Australia

Background

Frail, vulnerable patients facing who may not be able to continue to receive dialysis require access to a pathway of individualised care and treatment tailored to their needs. In its absence of this pathway patients are accessing high cost, high technological treatment options which can cause more suffering rather than the provision of care tailored to their symptoms. Terminal cancer patients, who have a similar symptom burden, have seamless access to specialist palliative and supportive care. However, in many renal services, this is largely non-existent or, at best, occurs on an ad-hoc basis.

Objectives

To evaluate the implementation of a novel, integrated kidney supportive care program (KSCp).

Methods

Using a prospective, longitudinal design, a range of data was collected from patients, carers and medical records to evaluate the structure, process and outcomes of the KSCp during the first 12 months of operation.

Results

The KSCp is multidisciplinary and co-led by an advanced practice nurse and a Consultant in Palliative Care. Compared with the preceding 12-month period when 27 patients were referred for palliative care, 129 patients were referred to the KSCp (mean age 71.6 years [range 27–91], 52% men, 53% on dialysis). The main purpose for referral was 37% symptom management, 17% conservative management, 11% decision-making, 7% advanced care planning and 29% more than one reason. Satisfaction with care was high for both patients and carers (95% and 100%, respectively).

Conclusion/Application to practice

The KSCp is delivering a care pathway that matches individual patient needs to the right health skill set. The integrated approach facilitates patients, carers and clinicians to explore complex decision-making around end of life care.

Disclosure: No conflict of interest declared

O-P 22

Prevalence and factors associated with frailty in end-stage renal disease patients under online-haemodiafiltration

P. Martins[1], C. Sales[2], R. Tavares[2], P. Mena-Santos[2, 3], A. Santos-Silva[4, 5], V. Miranda[1], E. Costa[4, 5], J. Fazendeiro Matos[6]

[1]NephroCare Maia, Fresenius Medical Care, Maia, Portugal; [2]Centre for Psychology at University of Porto (CPUP), University of Porto, Porto, Portugal; [3]Faculty of Psychology and Educational Sciences, University of Porto, Porto, Portugal; [4]Department of Biological Sciences, Faculty of Pharmacy, University of Porto, Porto, Portugal; [5]UCIBIO@REQUIMTE, University of Porto, Porto, Portugal; [6]NephroCare Portugal, Fresenius Medical Care, Porto, Portugal

Background

A growing proportion of end-stage renal disease (ESRD) patients on dialysis is older leading to a physiological decline and frailty, which is a risk factor for morbidity and mortality. Research about frailty in ESRD patients under online-haemodiafiltration (OL-HDF) is needed.

Objectives

To evaluate the frailty prevalence, and its association with sociodemographic, clinical and biochemical markers in OL-HDF patients.

Methods

Cross-sectional study with 97 ESRD patients (39.2% males; 69.86±14.03 years old) on OL-HDF. Patients' frailty classification was performed using Tilburg Frailty Indicator (TFI). Data about sociodemographic variables and comorbidities, dialysis parameters, clinical, and biochemical parameters were evaluated.

Results

We observed frailty in 62.8% patients with a significant correlation between age and physical frailty score (r=0.271; p=0.009).

As compared to the remaining patients, the frailty prevalence

was higher in

- females (72.0% versus 45.5%, p=0.021).
- patients with two ≥chronic diseases (72.2% versus 46.9%; p=0.023)

was lower in

- patients living with a partner (41.0% versus 80.9%; p<0.001) and in
- patients eligible for renal transplantation (70.4% versus 44.8%; p=0.033). Multiple regression analysis identified civil status (beta=0.260; p=0.013), ≥two chronic disease (beta=-0.302; p=0.004) and not being eligible for renal transplantation (beta=-0.209, p=0.040) as independent variables significantly associated with the global frailty score (R2=0.247).

Conclusion/Application to practice

Our results confirm that frailty is a highly prevalent condition in ESRD patients on dialysis, and suggests its association with psychosocial and family determinants. As mortality is greater in frail ESRD patients, the identification of frail patients is very important to implement measures to prevent frailty.

Disclosure: No conflict of interest declared

O-P 23

Palliative care in nephrology

G. Durtova[1], P. Vagenknechtova[1]

[1]Department of Medicine, General University Hospital, Prague, Czech Republic

Background

General University Hospital in Prague is taking part in the project 'Together until the end,' of the Avast Foundation which is supposed to aid in the development of palliative multidisciplinary teams, further education of hospital personnel, and systemic inclusion of palliative care across the overall working of the hospital.

Palliative care is approach aiming at increasing the quality of the life of the patients and their families in the case of a chronic disease or illness in its terminal stage. Palliative care is based on cooperation between the patient, their family, and the multidisciplinary team.

Department of Medicine, which provides the care for the nephrologically ill patients, including those who are being treated using the haemodialysis or the peritoneal dialysis method, is taking part in the project. A multidisciplinary team, which includes physicians, psychologists, a social worker, and nurses, was established. It aims to implement palliative care into nephrology, where it lacked representation before.

This team employs modified internationally acclaimed criteria to judge the overall state of the patients and, if needed, arrange the transition from curative to palliative care, while also applying the institution of Advanced Care Planning and the substitute consent.

The project was launched in September 2016. It included fourteen dialysed patients. Nurses monitored the symptoms of these patients, psychologists evaluated their psychic and mental state, and physicians discussed with them the potential of further care, including the option of withholding/withdrawing the dialysis.

We would like to share the findings of this project with other nephrologic departments.

Disclosure: No conflict of interest declared

O-P 24

Adriano a patient whose story changed the approach to end-of-life care in our centre

C. Dente[1]

[1]Nephrology And Dialysis, Aslbi, Biella, Italy

Background

A study published in 2011 by the *American Nephrology Nurses' Association* emphasized the importance of training physicians and nurses who take care of terminally ill dialysis patients.In their article published in the *Scandinavian Journal of Caring Sciences* in 2012, centreAasen-Kuangavsen-Heggen pointed out that sharing the decision-making process with patients improves care and quality of life.The story of Adriano shows how this process was implemented in a our center and how it resulted in the acquisition of new knowledge and redefinition of care pathways involving patients and families.

Objectives

The story of Adriano illustrates how decisions regarding dialysis withdrawal were made and how collaboration with palliative care began.

Methods

With his twenty-year experience as a dialysis patient and his remarks about the end of life, Adriano contributed to a change. His story encouraged the team to participate in specific training courses. Two nurses achieved a Bachelor's Degree in Palliative Care: this resulted in our team collaborating with palliative care unit on a project (2006) dedicated to terminally ill patients.

Conclusion/Application to practice

This experience shows relationship with patients does not end when palliative care is involved. Shared pathways establishing enduring relationships with patients and their family help health professionals grow. In addition, between 2008 and 2015 we had 105 cases of patients who either withdrew from dialysis or decided to end their life without any other treatment: all made their decisions autonomously and got the support of our team and palliative care unit till the end of their life

Disclosure: No conflict of interest declared

O-P 25

The experience of nursing staff in the therapeutic encounter with terminally ill dialysis patients

A. Matanis[1], Z. Greemberg[1], E. Goland[1]

[1]Dialysis Unit, Galilee Medical Center Nahariya, Nahariya, Israel

Background

Dilemmas and ethical issues concerning the subject of death are among the most difficult issues challenging hospital dialysis nurses.

This study focuses on the experience of nursing staff treating terminally ill dialysis patients. Nurses don't always have the appropriate tools to manage a conversation about end of life or the inner strength to raise the matter with the patient and his family. In many cases the nursing staff feels helpless and uncertain concerning medical decisions regarding the continuation of treatment, providing optimal care and meeting the preferences, needs and desires of patients to die with dignity.

Objectives

To identify the difficulties of the nephrology nursing staff in dealing with terminal patients. To describe their experiences, understand barriers, and learn coping mechanisms.

Methods

In-depth interviews with 10 Dialysis nurses with post-basic nephrology courses and 3-16 years experience, covering demographics, terminal settings, types and importance of terminal care, locating family therapy and identifying patient/ family needs.

Results

Three areas of difficulty were identified:

1. Preventing physical suffering as a basic need by attaining knowledge of pain relieving medications.
2. The presence of the family at the bedside: a source of emotional support that provides a positive environment and enables mutual separation processes.
3. The team's emotional coping: all the staff stressed the need for developing personal protection mechanisms for end-of-life care.

Conclusion/Application to practice

Supportive care is becoming more prevalent in the dialysis setting. Dialysis nurses manage the comprehensive care of the patient and their family. Therefore, it is essential they receive appropriate training and support.

Disclosure: No conflict of interest declared

S 13 Parallel Session
Paediatric renal care
Theatre Hall, 16:00-17:30

GUEST SPEAKER

Families and health professionals: developing and evaluating a digital, home-based care-management app in childhood CKD

V. Swallow[1]
[1]School of Healthcare, University of Leeds, Leeds, United Kingdom

Background

Care of children with chronic conditions such as CKD is a key health-policy priority. Chronic conditions account for 70% of health-care spending and improving service quality and cost-effectiveness for children and young people with CKD will remain critical for the foreseeable future. Home-based care-management is now central to the success of treatments (e.g dialysis and unpleasant and restrictive renal diets) that are all essential for the chiild's well-being and optimum outcomes. Websites, mobile-phones and tablet mobile-technologies are widely used by children, healthy peers and parents and carers for social networking, gaming and in health-care to support personal condition management. However little research has been undertaken that involves children with conditions such as CKD, families and health professionals in the rigorous developemnt and evaluation of these technologies. Therefore families are uncertain where to go for relaible and trstworthy advice.

Objectives

To:
- discuss the current evidence for digital, home-based care-management apps
- describe current research underway to develop and evlauate reliable and interactive apps
- explore the benefits of involvong children with CKD, families and health professionals in develeoping and evaluating digital, home-based care-management apps

Methods

Using a mixed methods approach we have developed an online parent information and support web app for parents of children with CKD. This paper will describe the development of the app, and its evaluatuion in a feasibility randomised controlled trial, the lessons learned from this work and the next steps in developing a smartphone app for children with CKD and their families

Disclosure: No conflict of interest declared

O 12

Sensitisation in paediatric kidney transplantation – a case study

J. Reynolds[1]

[1]Renal Unit, Women's and Children's Hospital, Adelaide, Australia

Background

Kidney transplantation is the ideal treatment for children with end stage kidney disease. It allows for optimisation of physical and psychosocial growth and well-being. The fact is though, for this cohort of patients, they will require more than one renal transplant in their lifetime.

Unfortunately, kidney transplantation often results in the development of *De novo* adonor specific antibodies (dnDSA) which persist after kidney allograft failure or - more commonly known as, immunological sensitisation. The presence of dnDSA complicates the second and subsequent transplants, significantly increasing the risk of acute rejection and thus reducing the pool of potential kidney donors. This, of course, results in longer wait times for suitable organs.

Current literature supports the realisation that HLA mismatches at first transplant leads to a much higher immunological sensitisation risk than others because of eplet mismatches.

Conclusion/Application to practice

This case study follows the journey of one such child from first transplant, through to graft failure and the subsequent desensitisation schedule required for this child to receive a second renal transplant from a deceased donor. It captures the human side of the roller coaster ride associated with waiting for an organ and being an organ recipient as well as the impact that advances in transplant immunology potentially can have for this group of patients. It highlights the concept that donor selection should be further modified to capture eplet mismatching.

Disclosure:

I am applying for the "Astellas Practice Development Travel Award" through the Transplant Nurses' Association (Australia) for a financial grant application for funding to travel & attend the EDTNA/ERCA 2017 conference.

O 13

Quality of life in paediatric patients with chronic kidney disease

S. Eloot[3], E. De Bruyne[1], Ch. Van Herzeele[1], E. Snauwaert[2], E. Holvoet[3], S. Vermeiren[3], E. Van Hoecke[1], L. Goubert[4], W. Van Biesen[3], A. Raes and J. Vande Walle[2]

[1]Paediatrics, Ghent University Hospital, Gent, Belgium; [2]Paediatric Nephrology, Ghent University Hospital, Gent, Belgium; [3]Nephrology, Ghent University Hospital, Gent, Belgium; [4]Experimental-Clinical and Health Psychology, Ghent University, Gent, Belgium

Background

The longitudinal UToPaed study (Uraemic Toxins in Paediatrics) of the Ghent University Hospital investigates the influence of uraemic toxins on different comorbidities in children with chronic kidney diseases (CKD). Preliminary cross-sectional results are available regarding socio-demographic variables and quality of life (QoL).

Methods

Thirty-eight CKD children (GFR 52 [28;73]) were included (age 7.7±4.7; 28 boys, 2 on dialysis). Twenty-two were 8-18y and completed a general (PedsQL™ 4.0 Generic Core) and disease-specific QoL questionnaire (PedsQL™ End Stage Renal Disease), while the parents of all included children (29 mothers) completed the parent modules of both PedsQL™ questionnaires and a socio-demographic questionnaire.

Results

Parents and patients both reported a lower general quality of life (70.6±18.5versus 71.8±13.6) compared to control parents and healthy children (87.6±11.0 versus 83.4±11.0). In the 8-12y group, parents report a lower disease-specific QoL compared to their child (74.5±14.9 versus 84.2±9.1), while no differences were found between the reports of parents and patients in the 13-18y group (65.2±16.2 versus 67.9±16.5). Eighteen parents perceived a deterioration of their own health since the medical diagnosis of their child. In 19/38 families at least one parent reduced work activities.

Conclusion/Application to practice

This cross-sectional study shows a lower QoL in children with CKD, either using parents or children as informants. As this study is part of a longitudinal study, we aim to further explore the quality of life and other psychological comorbidities in children with CKD.

Disclosure: No conflict of interest declared

O 14

The role of parents in global pediatric kidney care

D. Drozdz[1]

[1]Department of Pediatric Nephrology and Hypertension, Jagiellonian University Medical College, Krakow, Poland

In pediatrics the physician-patient co-operation is based on the co-operation with the child and his family, so it is necessary to create a good, constructive relationship.

The effectiveness of pediatric therapy is a function of good communication of the physician with the child and his or her parents with regard to the child's age and the understanding of the provided recommendations (this should be verified). Non-adherence to recommendations is a major obstacle in achieving therapeutic goals.

Parents play a central role in the care of children with chronic kidney disease. Parents deliver home-based and technically demanding interventions, including dialysis and nutritional supplementation.

According to Tong A. et al. the experiences of parents of children with CKD could be grouped into 3 clusters:

- intrapersonal issues (involving the psychological, emotional, and physical impact of the child's illness);
- interpersonal issues (involving the parents' interaction within the family and relationships with staff and friends);
- external issues (involving the practical needs, responsibilities, and logistic concerns of parents).

Parents of children with CKD have reported lower quality of life, difficulties in managing the child's care, higher levels of anxiety and maladaptive behavior. Studies reported a restriction of the social life of parents and poor communication between parents and dialysis staff. This in turn can have a detrimental impact on the child's personal development and medical treatment. Sufficient support for parents may prevent or ameliorate these problems and lead indirectly to better outcomes for children.

Some centers developed multidisciplinary family education programs for children with chronic kidney disease and their families. Improvement of medical, psychological and social outcomes are the main aims.

O 15

Nursing approach to continuous renal replacement treatment in neonates with acute kidney injury: the experience of a hub paediatric renal centre

J.M. Igeno San Miguel[1], E. Vidal[1], E. Vianello[1], L. Murer[1]

[1]Pediatric Renal Unit, Woman's and Child's Health Department, Padua University Hospital, Padua, Italy

Background

Peritoneal dialysis is the renal replacement therapy of choice for acute kidney injury (AKI) in neonate, but in some cases is not feasible or effective. Continuous renal replacement therapy (CRRT) machines are used off label in infants smaller than 15 kg and are not designed specifically for small infants.

Objective

To present the experience with the monitor CARPEDIEM® (Bellco-Medtronics, Mirandola, Italy), a machine specifically designed for CRRT in neonates and small infants.

Methods

The review of the clinical charts of all children treated in the Hub Center with the CARPEDIEM® monitor from February 2014 to December 2016.

Results

11 patients were treated with a median weight of 3425 gr [interquartile range 2650-3890] for overall 47 sessions. Median blood flow rate (Qb) was 3.2 ml/Kg/min [interquartile range 1.5-4]. Mortality rate was 54% and was mainly related with diagnostic category and amount of fluid overload. Technical complications were observed in few cases.

Conclusion/application to practice

According to this experience, the CARPEDIEM® machine can be safely used for treating neonates and small infants with AKI and fluid overload. The CARPEDIEM® could reduce the range of indications for peritoneal dialysis, widen the range of indications for CRRT, make the use of CRRT less traumatic, and expand its use as supportive therapy, even when the complete renal replacement therapy is not indicated.

O-P 26

Empathy - an essential virtue of a dialysis nurse

G. Di Pietro[1], D. Dileo[1], F. Barci[2], A. Pizzo[2], M.T. Parisotto[3]

[1]NephroCare Italia, Taranto Dialysis Unit, Taranto, Italy; [2]NephroCare Italia, Nursing Coordination, Naples, Italy; [3]Fresenius Medical Care, Care Value Management, Bad Homburg, Germany

Background

A dialysis nurse must continually learn and apply the best protocols into practice. Over time, she/he will gain more knowledge and clinical experience, but this is often not enough. Naturally, patients prefer not only to be cared by a well-trained nurse but by a well-trained and empathetic nurse

Objectives

To determine the empathic capacity of the nursing staff and to evaluate the patients' satisfaction related to nurses knowledge and empathy.

Methods

In November 2016, we conducted a self-evaluation test with 10 questions regarding everyday working life and type of behaviour of nurses among the nursing staff. To give the nurses sufficient time to improve their behaviour, another questionnaire was administered to patients in January 2017. The goal was to determine whether patients consider their nurses to be well-prepared, competent, and above all empathetic.

Results

Out of the 22 nurses who completed the test, 8 were found to have a high and 14 a moderate empathy. 63.6% (n=14) of nurses with an experience of >10 years had a lower degree of empathy as compared to younger nurses (36.3, n=8). Female nurses (72.7%, n=16) were less empathetic than male. Out of 102 patients, 96 completed the questionnaire and 85.8% perceived the nurses as being very empathetic.

Conclusion/Application to practice

Nurses' empathy can decrease over time; therefore it is crucial to regenerate their awareness for the necessity of empathetic care. About 85% of participating patients perceived the nurses to be very empathetic at the end of the survey. However larger controlled studies are required to further investigate this topic.

Disclosure: No conflict of interest declared

S 14 Parallel Session
Psychological and social impact of renal disease
Auditorium Hall, 9:00-10:30

GUEST SPEAKER

An experienced based decision aid on renal replacement therapy

H. Bart[1]
[1]Dutch Kidney Patients Association, Bussum, Netherlands

Background

There is evidence that decision aids compared to usual care improve people's knowledge regarding options, and reduce their decisional conflict related to feeling uninformed and unclear about their personal values. There is also evidence that decision aids stimulate persons to take a more active role in decision making, and improve accurate risk perceptions when probabilities are included in decision aids, compared to not being included.

Objectives

The Kidney Guide is a decision aid for kidney patients who had to decide for RRT and is based on experience knowledge. It's embedded in de multidisciplinary guideline "Renal Replacement Therapy, yes or no". Beside the Kidney Guide there is also the Option Grids that handles also about the nine different treatment options from a medical point of view (HD [4 options], PD [2 options], Transplantation [2 options] and conservative therapy).
Important part of the guideline is the principle of shared decision making (SDM).

Methods

Step 1: International literature search
Step 2: Production of patient statements for all RRT modalities on film
Step 3: Preparing the material for a decision aid
Step 4: Testing the Kidney Guide
Step 5: Implementation of the Kidney Guide

Results

The Kidney Guide was presented for patients (October 2016) and to all nephrology departments in the Dutch hospitals (March 2017) together with the brochure SDM, an info graphic about SDM, the option grids and the leaflet 'ask three questions'.

Conclusion/Application to practice

The implementation proces is going on. The Kidney Guide is also part of different studies of best practices on SDM.

Disclosure: No conflict of interest declared

O 16

Emotional disorders related to pain and clinical aspects in patients undergoing chronic haemodialysis

A. Masià-Plana[1]

[1]Haemodialysis, Clinica Girona, Girona, Spain

Background

Emotional Intelligence has been used as a variable of health indicator, emotional wellbeing and vital satisfaction, it has also been associated with coping strategies and general psychological adjustments. Pain, high levels of urea and potassium can also have a direct impact to the physical and emotional aspects to patients undergoing chronic haemodialysis.

Objectives

1.-Describe the correlation between anxiety, depression, emotional intelligence and quality of life in patients undergoing chronic haemodialysis treatment.
2.-Explore the correlation between anxiety and depression with clinical aspects such as urea, haemoglobin, PCR, phosphate and potassium in blood.
3.-Analyse the impact of pain to anxiety and depressive levels

Methods

Quantitative, cross-sectional methodology. 138 patients were interviewed from four haemodialysis centres in Spain. The Kidney Disease Quality of Life short form (KDQOL-SF) questionnaire, the Hospital Anxiety and Depression Scale (HADS) and the Trait Meta Mood Scale (TMMS-24), were used for the data collection. Also, the Visual Analogue Scale (VAS) to evaluate the pain level.

Results

High levels of anxiety correlate with high levels of emotional attention within the Emotional Intelligence scale. In general the levels of depression decrease when the levels of emotional repair increase. High levels of pain relate directly to high levels of anxiety, depression and emotional attention.

Conclusion/Application to practice

An ongoing individualised nursing care plan should be performed to improve quality of life and avoid emotional disorders of the patients. The incorporation of an Emotional Intelligence training program for the patients could help them to achieve the tools they need to cope with all aspects of chronic disease.

Disclosure: No conflict of interest declared

O 17

The impact of dance movement therapy during the dialysis procedure on haemodialysis patients

H. Armaly[1], C. Livneh[2], H. Rosenblum[2], E. Haj[1], Z. Armaly[1], M. Zaher[1]

[1]Nephrology and hypertension department, E.m.m.s Nazareth hospital, Nazareth, Israel; [2]Dance movement therapy, the academic college at wingate, Natanya, Israel

Background

Dance movement therapy is a unique form of therapy using movement as a basis to further enhance the emotional, cognitive, physical and social integrity of the individual

Objectives

To create a safe emotional and socially-acceptable environment, holding a haemodialysis patient's concerns, and verbal/nonverbal self-expression about their conscious/unconscious experiences and feelings of their illness

Methods

This is an evaluative phenomenological process conducted in the Nephrology department in Nazareth Hospital focusing on the emotions, thoughts and nonverbal movements of the haemodialysis patients.

The process evaluates the emotional state, body awareness and pain management of 6 patients who received two years of dance/movement therapy individual sessions, once a week, at the patients' bedside during the dialysis treatment.

The research tools included interviews, art creations, videos, and still photographical observations. We compared the observed nonverbal movement experiences prior and after therapy and whether dancing therapy influenced the individuals' experience, and if the body memory unravels the patients' unconscious conflicts.

Results

Patient's mood improvement, social skills and emotional body awareness have improved after dance movement therapy sessions. This was evident by: 1) High levels of energy; 2) Capability of sharing personal experiences; 3) Enhancement in interpersonal relations; 4) Groomed appearance compared to neglected appearance; 5) High self-image; 6) Developed ability to cope with emotional and social life aspects; 7) Development of muscle relaxation as compared to stressed muscles; and 8) Intentional movement effort.

Conclusion/Application to practice

Our study supports applying dance movement as a therapeutic approach for improving haemodialysis patient's quality of life and spiritual mood.

Disclosure: No conflict of interest declared

O-P 27

Using creative and therapeutic activities to improve dialysis patients' depressed-mood and physical inactivity

G. Pedreira-Robles[1], A. Vasco-Gómez[1], C. Herrera-Morales[1], Y. Martínez-Delgado[1], E. Junyent-Iglesias[1], T.M. Ho Wong[1]

[1]Hospital Del Mar, Barcelona, Spain

Background

Haemodialysis (HD) has a great impact on health-related quality of life (HRQoL). The prevalence of major depression in HD patients is estimated to be 23%-42% in Europe. Humour, physical exercise and emotional support have been widely used with good results to boost patients' mood and overcome sedentary behaviour.

Objectives

To present our Activity Programme aiming to lessen the considerable psychological and physical burden experienced by dialysis patients.

Methods

Between January and May 2016, we performed an observational study to assess the mental and physical status of 41 patients on chronic HD treatment. This study revealed that depression (73.1%), anxiety (68.2%), dependence (73.1%), cognitive impairment (53.6%) and poor HRQoL prevail among these patients. We therefore planned and launched a programme of recreational and therapeutic activities intradialysis to reduce patients' boredom due to inactivity. We started in March 2016 by providing them with cheerful activities such as clowns' weekly visits, *Mandalas* workshop and festive celebrations. Patients' mental and physical status with a number of variables and indicators will be assessed at 12 months (March 2017).

Results

Our initial attempt to introduce these recreational activities as intradialysis therapy has been rated positively by all patients (excellent 78.1% and above average 21.9%). Quantitative and qualitative comparisons of results will be presented at the Conference.

Conclusion/Application to practice

This preliminary initiative is promising. We plan to maintain these therapeutic therapies and include others such as choir performances, physiotherapist, psychologist and Expert Patient in order to help consolidate this programme.

Disclosure: No conflict of interest declared

O-P 28

Involvement of psychological factors in non-compliance among haemodialysis patients

F. Srouji[1]

[1]Nephrology & Hypertension, E.M.M.S- Nazareth hospital, Nazareth, Israel

Background

Non-adherence among haemodialysis patients is a worldwide problem. This phenomenon raises concerns that unique psychological characteristics are responsible for the high prevalence of non-compliance among these patients. Haemodialysis violates the bio-psychosocial balance of the patient. Changes in body image, dependence on the machine and clinical team, and the numerous restrictions imposed on the patients cause a change in the patient self-perception and development of negative feelings, such as drop in self-esteem, loss and hopelessness. These feelings contribute to anxiety, depression and lower adherence. Additional psychological aspects that may contribute to low compliance of hemodialytic patients is impairment of psychological defence mechanisms.

Objectives

To characterize the factors underlying high non-compliance among hemodialytic patients.

Methods

We searched Google Scholar for the relevant literature where we applied the words: Haemodialysis, psychological factors, non-compliance and defence mechanisms. We retrieved 53 articles and hereby is a brief summary of the main findings.

Results

Several psychological aspects may be responsible for the low compliance of hemodialytic patients including activation of ineffective psychological defence mechanisms. Specifically, neurotic and immature defence mechanisms (such as: reversal reaction, denial, dissociation, projection, somatization and Split) are more common among haemodialysis patients compared to the healthy population as well as compared with non-dialytic chronically ill patients. Few studies reported improved adherence among HD patients following non-drug psychological therapy as was evident by better psychological behavior and raised self-esteem.

Conclusion/Application to practice

Psychological factors unique to haemodialysis patients, such as impaired self-perception or the use of ineffective psychological defence mechanisms are strongly associated with non-compliance.

Disclosure: No conflict of interest declared

O-P 29

An investigative study on the quality of life in our dialysis program

E. Nagy[1], J. Toth[1, 2], I. Kulcsar[1,2]

[1]Dialysis Centre No. 6, B. Braun Avitum Hungary cPlc., Szombathely, Hungary; [2]Markusovszky University Teaching Hospital, Szombathely, Hungary

Background

Annually we conduct an investigation into the quality of life (QOL) in our dialyzed patients.

Objectives

We looked at if the opinions of our established patients had changed and we also looked at the opinions of those patients new to dialysis.

Methods

We analyzed the QOL of 235 patients in 2015 (178 haemodialyzed-HD and 57 peritoneal dialyzed-PD) with combined questionnaires. 181 were on dialysis (141HD, 40PD) and were asked about QOL in 2016. 46 new patients also participated in the study (32HD, 14PD).

Results

92-93% of patients rated their QOL good or acceptable at the first examination. The situation has not changed significantly after a year, However with new HD patients the score was lower (84%). New patients reported significant relapse in their condition (41%), while in the established patients this ratio was between 5-20%. 92-97% of patients agreed that if they had the choice they would accept dialysis treatment. A smaller proportion of established patients found that dialysis did not meet their expectations (2-7%). There was no change in this ration after a year. Of the new patients, 22% of them felt that treatment did not meet their expectations.

Conclusion/Application to practice

Surprisingly a high rate of estabished patients who participated in the study classified their QOL good or acceptable. One year on this rate did not change. In new patients the situation is different as many of them felt their expectations were not me but their expectations were unrealistic.

Disclosure: No conflict of interest declared

S 15 Parallel Session
Safe vascular access
Theatre Hall, 9:00-10:30

GUEST SPEAKER

The importance of the vascular access coordinator

M. Gallieni[1]
[1]Renal Unit, ASST Santi Paolo e Carlo - University of Milan, Milano, Italy

Background

Delivery of healthcare is ameliorated by a team approach. Renal replacement therapy is more effective when patients have an adequate vascular access (VA), which is ideally an arterio-venous fistula, or alternatively a graft or a vascular catheter. The identification of a VA specialist within each dialysis team can be crucial for obtaining good outcomes in VA, keeping a low number of grafts and catheters, as well as monitoring functioning accesses and planning timely interventions before they irreversibly fail. The most important role of the vascular access coordinator is not the ability to create an access but the organization and coordination of timely interventions to provide and maintain a functioning VA.

If possible, both a nephrologist and a nurse should strictly cooperate as VA coordinators and be responsible for planning new accesses, maintaining well-functioning existing VA, and improving the kind of available VA in the specific patients. An access referral pathway should be put in place, giving a quick solution to the many logistic and clinical problems that need to be addressed for obtaining an adequate VA.

Key components of a VA program should include a dedicated access coordinator and outcome tracking via a prospective database. The coordinators can make decisions based on the reports received from the nursing staff, on data obtained from routine controls of VA function, as well as from procedure reports. They should also keep contacts with other specialists which are vital components of the VA team but are not part of the dialysis unit.

Disclosure: No conflict of interest declared

O 18

Surveillance of arteriovenous vascular accesses by the use of thermodilution

M. Cruz[1], I. Nunes[1], B. Pinto[2], J. Fazendeiro Matos[2]

[1]NephroCare Faro, Fresenius Medical Care, Faro, Portugal; [2]NephroCare Portugal, Fresenius Medical Care, Porto, Portugal

Background

An arteriovenous vascular access (AVA) surveillance programme in haemodialysis units should focus on the early detection of potential AVA dysfunctions promoting timely correction by angioplasty or surgical intervention. Vascular access flow (Qa) determination is considered the "gold standard" in AVA surveillance. In our clinic, we evaluate Qa by thermodilution. An integrated device in the dialysis machine makes the procedure easy and non-invasive without requiring any additional equipment.

Objectives

To assess whether thermodilution can predict a potential AVA's dysfunction in patients with end-stage renal disease undergoing haemodialysis at an early stage.

Methods

We conducted this quantitative, descriptive-correlational, longitudinal, and retrospective study from June 2011 to June 2016. With non-probabilistic sampling we assessed 108 patients of our centre taking part in the AVA surveillance programme, including vascular access flow (Qa) determination by thermodilution and patient treatment according to a surveillance protocol.

Results

We did not observe any statistically significant differences between the Qa values of fistulae and grafts (p=0.224). 85 thrombotic events and 53 AVA failures were reported. Time from the date of AVA creation until the first thrombotic event was 30.18 (σ=28.808) months on average. The average difference between the first and the second thrombotic event was approximately 8.79 (σ=7.465) months.

Conclusion/Application to practice

We believe that the implementation of an AVA's surveillance programme allows for early detection of a potential AVA's dysfunction enabling early interventions (before thrombosis and AVA failure occur).

Disclosure: No conflict of interest declared

O 19

Implementation HAIDI related hand ischemia screening assessment

S. Rogers[1]

[1]Dialysis, Codia Waterland BV, Purmerend, Netherlands

Background

With an aging population using the upper arm for vascular access is becoming frequently chosen, and can increase hand ischemia. Research shows that 5% of patients are treated for mild to serious hand ischemia, with increasing HAIDI (Haemodialysis Access-Induced Distal Ischaemia). Symptoms include cold, pain, cramp, reduced sensation and tingling in the dialysis hand.
Can screening patients prevent this?

Methods

Patients with a brachial fistula were screened using a grading system based on the 5 risk factors associated with HAIDI. The scores were graded, and findings registered and checked with protocols and patient information available. Recommendations were implemented in our dialysis centre.

1. All patients with HAIDI classified using the 1-4a system
2. Twice yearly screening
3. Clinical education for dialysis nurses
4. Commencement of nurse plan for at-risk patients
5. Develop patient information folder and introduce in pre-dialysis clinic

Results

75% of patients reported at least 1 of the 5 HAIDI symptoms. 30% of our patients have a brachial fistula, one patient with a blood flow of more than 3500ml. Over 50% have hand ischemia symptoms: a cold and pale hand. Most symptoms are treated conservatively with a glove, medication or exercises. Referral to a vascular surgeon may be required.

Conclusion/Application to practice

Nurses aware of the symptoms of hand ischemia and the associated related problems can intervene and liaise with the multidisciplinary team and commence a treatment plan. The grading system is essential to compare the patients' results at future assessment.

Disclosure: No conflict of interest declared

O-P 30

Antiplatelet/anticoagulation treatment and vascular access interventions

T. Freitas[1], V. Romão[1], M. Duarte[1], C. Gonçalves[1], F. Gomes[1], B. Pinto[2], R. Peralta[2], J. Fazendeiro Matos[2]

[1]NephroCare VFXira, Fresenius Medical Care, VFXira, Portugal; [2]NephroCare Portugal, Fresenius Medical Care, Porto, Portugal

Background

The dynamics of intravascular access (VA) flows and blood viscosity may contribute to enhance the probability of thromboembolic episodes thus increasing VA comorbidities and subsequent interventions.

Objectives

To assess the impact of the antiplatelet/anticoagulant (APT/ACT) on the VA patency of haemodialysis patients.

Methods

Retrospective, observational study enrolling active patients between 11/2013 and 10/2016. Two groups were considered: patients with and without APT/ACT in haemodialysis. We analyzed angiographic/surgical interventions and thrombotic events.

Results

We analyzed 411 VAs: 299 (72.7%) Arteriovenous Fistulas (AVF), 112 (27.3%) Arteriovenous Grafts (AVG).

AVF analysis revealed:

- Out of 157 (52.5%) patients with APT/ACT, 113 (71.9%) did not require any intervention. In the remaining 44 (28.1%) patients, 49 required angiography and 32 surgical interventions and 0.36 thrombotic events/patient occurred.
- Out of 142 (47.5%) patients without APT/ACT, 109 (76.7%) did not require any intervention. In the remaining 33 (23.3%) patients, 20 required angiography and 48 surgical interventions and 0.58 thrombotic events/patient occurred.

AVG analysis revealed:

- Out of 68 (60.7%) patients with APT/ACT, 40 (58.8%) did not require any intervention. In the remaining 28 (41.2%) patients, 43 required angiography and 9 surgical interventions and 0.5 thrombotic events/patient.
- Out of 44 patients without APT/ACT, 22 (50%) did not require any intervention. In the remaining 22 (50%) patients, 46 required angiographies and 33 surgical intervention and 1.32 thrombotic events/patient occurred.

Conclusion/Application to practice

We found out that the group of patients with APT/ACT had a lower intervention rate.
Both AVF groups showed fewer complications than patients with AVG.
Patients with APT/ACT had a lower number of thromboses.

Disclosure: No conflict of interest declared

O-P 31

Collecting data to determine the best dressing of the CVC exit site

M.T. Parisotto[1], **C. Miriunis**[1], **F. Pelliccia**[1]

[1]Care Value Management, Fresenius Medical Care, Bad Homburg, Germany

Background

Arteriovenous fistulae are the preferred vascular access type for haemodialysis, followed by arteriovenous grafts. However, when these access types are not possible, a central venous catheter (CVC) is used. The main issue with patients with a CVC is that they are more susceptible to catheter exit site-related infections which are in turn associated with increased morbidity, mortality, and costs.

Objectives

To evaluate CVC outcomes focusing on the type of dressing and dressing replacement frequency with careful assessment of complications and patency.

Methods

We evaluated the data collected in a clinical database regarding the type of dressing used and dressing replacement frequency.
All statistical analyses were performed using the SPSS software (SPSS V19).

Results

Data of 7,029 CVC patients were analysed. Mean age 64.93±15.06; female 50.16%. Investigation period: 01.01.2014 - 31.12.2016. Dressing types used were divided as follows: gauze dressing 59.6%, transparent dressing 38.7%, and no dressing used 1.7% of all patients. The transparent dressing was associated with a significantly higher risk of both catheter-related bloodstream infections (HR 1.42; 95% CI 1.03-2.10, p=0.03) and CVC failure (HR 1.14; 95% CI 1.02-1.29, p=0.02) as compared to the gauze dressing.

Conclusion/Application to practice

Although earlier studies report a lower risk of catheter-related bloodstream infections for the transparent dressing as compared to gauze dressing, our findings were statistically significantly different. Therefore, further studies are required to evaluate the outcomes of the CVC patients to evaluate how exit site care can be individualised and optimised to reduce morbidity and mortality and increase the quality of life in this population.

Disclosure: No conflict of interest declared

O-P 32

Impact of a reference nurse programme on self-care behaviours in patients with vascular access

S. Dinis[1], A. Martins[1], R. Camisa[1], A. Seabra[1], J. Fazendeiro Matos[2], M.T. Parisotto[3]

[1]NephroCare Coimbra, Fresenius Medical Care, Coimbra, Portugal; [2]NephroCare Portugal, Fresenius Medical Care, Porto, Portugal; [3]Care Value Management, Fresenius Medical Care, Bad Homburg, Germany

Background

Dialysis patients and health-care professionals consider the vascular access (VA) as the patient's lifeline. A good VA contributes significantly to the patient's well-being. Problems with the VA are considered one of the main causes of morbidity and disability. Guidelines recommend education programmes to provide patients with the necessary skills for VA care.

Objectives

To assess the impact of the Reference Nurse Programme (RNP) on self-care behaviour in haemodialysis patients with arteriovenous fistula (AVF).

Methods

70 patients participated in a quantitative, descriptive and correlational study.

We applied a scale of assessment of self-care behaviours related to AVF in haemodialysis (ASBHD-AVF) before and one year after RNP implementation. This 16 items Likert-type scale of 5 points ranges from "1 never apply self-care" to 5 "always apply self-care". Patients were also assessed using the Wilcoxon test.

Results

Comparing the evaluated ASBHD-AVF scores before and one year after RNP implementation, revealed statistically significant results ($p<0.05$) in 8 items. We highlighted two items with a statistically significant difference ($p<0.001$): "I do compression at home at puncture site if bleeding occurs" and "I immediately go to hospital/clinic if fistula has not thrill". The median scores of these two items increased from 3 before to 5 after RNP implementation.

Conclusion/Application to practice

RNP allows for an individualised approach to haemodialysis patients, enabling nurses to adequately respond to patients' needs. RNP had a very positive impact on self-care behaviours of patients with AVF, which will most likely provide health gains for the patient. These results are sensitive to nursing care.

Disclosure: No conflict of interest declared

O-P 33

A vascular access clinical pathway - an example of value added health care

M. Richards[1], T. Ncgobo[1], A. Jaranay[1], A. Delgardo[1], N. Richards[1]
[1]Nursing, SEHA Dialysis Services, Abu Dhabi, United Arab Emirates

Background

Valued add in health care is defined as improved outcomes at the same or reduced cost. Historically in Abu Dhabi 50% of patients were treated with a dialysis catheter and 2% of patients had a fistula at first dialysis.

Objectives

To evaluate a nurse led vascular access clinical pathway in terms of patient outcomes and cost.

Methods

A nurse led clinical pathway for vascular access was developed and implemented in June 2013. Vascular access clinics and link nurses, with direct nurse referral, were established in the main dialysis units. Following its introduction we monitiored the prevalence of fistulae and grafts, the prevalence of fistula at first dialysis and the prevalence of haemodialysis catheter associated blood stream infections (HDCABSI). Cost savings were calculated from pubished data and the local cost of catheter locking solutions.

Results

Following the introduction of the pathway the prevalence of fistula and graft use increased from 58% in June 2013 to 80% in December 2016 with a proportionate reduction in the use of catheters. The proportion of patients with a fistula at first dialysis increased from 2.6% in 2013 to 20% in 2016. The HDCABSI rate fell from 1 episode/1000 patient days in May 2013 to 0.26 episodes/1000 patient days in December 2016.
Cost savings were AED 1 million PA (€ 257,000), from catheter locking solutions, reduction in HDCABSI AED 3.5-5.5 million PA, (€09.-1.4 million), fistlua at first dialysis 2016/7 AED 17 millin (€4.4 million).

Conclusion/Application to practice

This nurse led clinical pathway has dramatically added value to the health care system.

Disclosure: No conflict of interest declared

S 16 Parallel Session
Peritoneal dialysis
Theatre Hall, 11:00-12:30

GUEST SPEAKER

Homeward Bound, achieving more home care in PD

B.P. Hoekstra[1]
[1]Dialysis and nephrology, Maasstad hospital, Rotterdam, Netherlands

Background

Peritoneal dialysis, relative simple in performance and equal to haemodialysis, is declining as kidney replacement modality in the developed countries. In the Netherlands PD numbers needs improving, for last year only 860 patients (of a total of 5600 dialysis patients) performed PD at home. Also throughout time the population has changed, so more assisted PD is needed and more caretakers need to be educated. Above that our government wishes more care outside the hospital.

Objectives

The SIG PD supports the Dutch PD nurses in these developments. We created a manual for training and education to give direction to learning processes of patient and caretaker. The objective of the manual is to offer information, give suggestions about learning style and program and the necessary skills. The manual is based on the ISPD guidelines and relevant literature. All centres can choose to use the manual the way fitting in their organisation. We see projects starting creating more home care. Introduction of e-health and internet is helpful and a good predialysis program offers shared decision making.

Conclusion/Application to practice

Creating a solid education program in a dialysis centre will be supportive for improving care, achieve more home care and hopefully raise PD numbers against reasonable costs. Comparison with other countries shows us that reimbursement differs and can sometimes be an obstacle for managing a solid system of PD. But working together, learning over the borders can help to achieve more home care in PD.

Disclosure: No conflict of interest declared

O 20

Life changes in peritoneal dialysis

M.A. Tavares[1]

[1]Diaverum, Dialysis Clinic, Figueira da Foz, Portugal

People with end-stage chronic renal failure see their life suffering from physical, psychological, family and social changes. One of a possible therapeutic approach is the peritoneal dialysis. This investigation has the main aim to understand the end-stage chronic renal failure person's experiences in the beginning of peritoneal dialysis treatment. A qualitative research of phenomenological orientation was held. The collection of information was carried out by a semi-structured interview to twelve participants who shared peritoneal dialysis treatment. The examined information followed the criteria proposed by Colaizzi's methodology (1978) and described by Streubert and Carpenter (2002).

After identifying the significant declarations and the construction of meanings to understand each person's experiences during the beginning of PD treatment emerged as main themes: the individual provisions, the supporting and/or inhibited conditions, the answers, the changes and the everyday life (re) construction. In the beginning of dialysis there are emotional responses of suffering, arise adjustments, changes and new perspectives of life which indicate the adherence and management of a new therapeutic regime. The family and social support network and the individualized and integrated professional assistance of a nurse have proved to be essential features by facilitating some conditions of transition to PD.

By knowing and interpreting the PD phenomenon as it is experienced we seek to contribute to a better understanding of the intricacies of this period of life, as well as to find aids to nurses' professional procedures and to the development of nursery scientific knowledge. In this way, it is suggested the establishment and implementation of a pre-dialysis nursing consultation which incorporates the patient and his family in the PD experience process, the creation of therapeutic groups that foster the sharing of experiences and the construction of teaching and training programs of the patient undergoing PD.

O 21

Evaluation of two hour short peritoneal equilibration test effectiveness in peritoneal dialysis

Z. Aydin[1], Y. Bakar[2]

[1]School of Health Services, Beykoz University, Istanbul, Turkey; [2]Management and Organisation, Adana Science and Technology University, Adana, Turkey

Background

The peritoneal equilibration test (PET) provides long-term monitoring of peritoneal permeability in patients who undergo peritoneal dialysis. However, the standard PET take time for both the patient and the nurse performing the procedure, and many centers cannot perform the test regularly.

Objectives

In this study, it was aimed to compare two hour PET results with standard four hour PET and evaluate its efficacy.

Methods

In this study were enrolled 83 patients. After ethics committee approval informed consent was obtained from the patients participating in the study.
Standard PET procedure was performed. Additionnally blood and dialysate samples were taken at both 2nd and 4th hours and glucose, creatinine and urea values were examined in these samples. 2nd and 4th hours D / P creatinine was calculated and the difference between the two results was compared. SPSS was used for data analysis.

Results

Mean age of the patient was 49,8 (+15/- 10) and duration of PD treatment was 4,2 years (+3/-1). The average and median results of D/P was found to be similar of 2 hour and 4 hour D/P.
Average: high average (0,52-for 2 hour) and (0,72 for 4 hour)
Median: high average (0,51-for 2 hour) and (0,72 for 4 hour)

Conclusion/Application to practice

This results shows that short pet could be used for determination of membrane characteristics and modification of the test could save time, decrease the cost which can lead more efficient use of hospital resources and work force of the clinics.

Disclosure: No conflict of interest declared

O 22

The effect of simulated Peritoneal Dialysis practice on psychomotor skills and self-sufficiency of students

E. Topbaş[1], G. Bingöl[1], Ö. Görgen[1], B. Terzi[1]

[1]Nursing, Amasya University School of Health, Amasya, Turkey

Background

Applying the proper technique for connections in Peritoneal Dialysis (PD) is crucial to preventing potential infectious complications.

Objectives

This study aims to investigate the effect of simulated peritoneal dialysis practice on psychomotor skills and self-sufficiency of students (28)

Methods

28 students were enrolled in the experimental study, where the test group was given training on PD application with PD simulation and the training was concluded with an analysis session. The control group was given theoretical training only, through videos. Psychomotor skills of students on PD applications were assessed at the end of training, self-sufficiency was also measured before and after the training.

Results

Psychomotor skill scores of students were significantly higher in the test group, however, no significant difference was found in self-sufficiency scores. Although the difference was not statistically significant, the self-sufficiency scores of the test group was found to be higher at the end of the training compared to initial score.

Conclusion/Application to practice

Practice of PD procedure using simulation technique was found to improve psychomotor skills, therefore it can be used to enhance the psychomotor skills.

Disclosure: No conflict of interest declared

O 23

How is your stomach?

L.T. Sørensen[1], J. Finderup[1]

[1]Renal Medicine, Aarhus University Hospital, Aarhus N, Denmark

Background

Patients in peritoneal dialysis (PD) are at high risk for developing constipation. Constipation may result in poor PD and is the leading cause of flow problems. Empirical data is limited in how PD patients experience, prevent and treat constipation.

Objectives

- To grow in knowledge about how PD patients experience, prevent and treat constipation
- To produce a patient information leaflet for PD patients focusing on prevention and treatment of constipation.

Methods

Qualitative interviews were conducted with six PD patients to identify what is their experience of constipation. Based on the interview findings, a patient leaflet has been developed with feedback from patients and professionals.

Results

Feedback from patients showed that they had not been informed about constipation. In terms of prioritisation patients considered diarrhoea more problematic and when prescribed laxatives to combat constipation did not take thme but did not inform healthcare professionals. There was therefore a difference in how the patient and the healthcare professional viewed constipation. Patients developed their own strategies to prevent constipation, which may be contrary to the professionals' recommendations.

Conclusion/Application to practice

A patient leaflet has been developed to support patients coping with constipation and to offer them greater choice in avoiding constipation.

Disclosure: No conflict of interest declared

S 17 Parallel Session
European Kidney Health Alliance (EKHA)
Chamber Hall, 11:00-12:30

GUEST SPEAKER

Europe and kidney disease: where nurses, patients, foundations and physicians join forces

R. Vanholder[1]
[1]Nephrology Section, University Hospital, Ghent, Belgium

Background

In this session several initiatives of the European Kidney Health Alliance (EKHA) to improve life of renal patients but also to prevent kidney disease are discussed.

Results

First we will briefly outline the structure and activities of EKHA (http://ekha.eu/), an alliance of 4 major kidney organizations in Europe, joining renal nurses, patients, foundations and physicians. EKHA launched in 2015 the EKHA Recommendations for Sustainable Kidney Care (http://ekha.eu/wp-content/uploads/2016/01/EKHA-Recs-for-Sustainable-Kidney-Care-25.08.2015.pdf), which contain four main pillars. The first focuses on prevention of CKD and its progression. Starting from the huge costs of renal care, a model is developed to reduce costs by promoting home therapies and transplantation. Since curative approaches do not reverse disease, however, secondary but especially primary prevention is the best way to refrain occurrence of CKD, resulting in lower societal costs but also in a healthier population. The second pillar of the Recommendations is devoted to patient choice and access to various renal replacement therapies throughout Europe. A survey was carried out in 7 European countries among kidney patients and revealed substantial gaps in patient education and information throughout Europe. Also education appeared unsatisfactory.

Conclusion/Application to practice

BBoth pillars of the Recommendations and also those to be considered next (on kidney transplantation and reimbursement strategies) will help EKHA to contact EU policy-makers as well as national policy and health care institutions to take initiatives for improvement of kidney health and kidney care in Europe.

Disclosure: No conflict of interest declared

S 18 Lunch Symposium
What do specialist nurses want to be able to do and what do they need to know to do it? Designing education programmes for expert clinical practice
Theatre Hall, 12:45 - 13:45

GUEST SPEAKER

What do specialist nurses want to be able to do and what do they need to know to do it? Designing education programmes for expert clinical practice

M. Richards

Abstract is not available

S 19 Parallel Session
Education
Auditorium Hall, 14:00-15:30

GUEST SPEAKER

The Magnet Nursing Environment - implications for renal practice

J.M. Sedgewick[1]
[1]Department of Nursing Education & Development, King Faisal Specialist Hospital & Research Centre, Jeddah, Saudi Arabia

Background

This presentation discusses what Magnet® accreditation has meant for renal nursing practice within a Middle Eastern, 500 bedded hospital, with a nursing workforce of 1400 nurses. Magnet status is an award from the American Nurses' Credentialing Centre (ANCC), an affiliate of the American Nurses Association to hospitals that meet a set of criteria which measure the strength and quality of nursing in the healthcare facility. Magnetstatus is the highest recognition awarded to a hospital or medical centre for achieving excellence in nursing.

The background to the development of the Magnet Recognition Program and evidence of the positive impact Magnet brings to healthcare facilities achieving Magnet accreditation is discussed. Achieving Magnet accreditation requires significant work to meet the high standards set by ANCC; these challenges are presented. The importance of shared governance as a central feature of the Professional Practice Model is discussed and how shared governance ensures nurses drive nursing forward at both at unit council and division council and organisational level.

Excellence in the quality of patient care, nursing practice and innovation in nursing practice is is achieved through the integration of the key components of the Magnet program into organisational infrastructures and clinical practice. These key components include ***Transformational Leadership, Structural Empowerment, New Knowledge and Innovation*** and ***Exemplary Professional Practice.*** Each of these components is discussed and how they translated into the renal practice environment. The value of the global partnership with the American Nurses Credentialing centre is outlined

Disclosure: No conflict of interest declared

O 24

Benefits of an accredited Renal Care training programme for nurses

C. Felix[1], R. Peralta[1], B. Pinto[1], J. Fazendeiro Matos[1]

[1]NephroCare Portugal, Fresenius Medical Care, Porto, Portugal

Background

Daily responsibility for patient care in a healthcare setting primarily lies within the responsibility of the nursing team. Modern nurses are highly trained professionals and can work in a wide variety of areas. However to work in the renal field in Portugal, any registered nurse must undergo an additional three month training period.

Objectives

- To ensure adequate initial nurse training about structured Renal Care for Nurses Programme (RCNP) accredited by an international independent organisation.
- To employ qualified nursing professionals able to work in any renal care facility and provide the best possible patient care.

Methods

A 420 hour training programme comprising theoretical and practical modules was structured and standardised and received accreditation in September 2014. Nurses were trained and integrated into the company after programme fulfilment.

Results

From September 2014 to September 2016, 12,600 hours of training were administered as part of 30 RCNP, involving 19 dialysis centres and 100 nurses received an accredited training certificate. 97 nurses were employed in any of the company's 37 Portuguese dialysis centres.

Conclusion/Application to practice

We assume that our organization benefited from having a standardised training programme to enable our nurses to provide the best possible and consistent level of patient care, reducing background asymmetries and risks associated with different practices. Moreover, an accredited programme for the initial training of renal nurses seems to contribute to increase faculty members' motivation and commitment, while helping to keep their knowledge up to date.

Disclosure: No conflict of interest declared

O 25

Peer Educator led home-based education in living donor transplantation for Black & Asian patients

N. Jain[1], G. Bhana[1], L. Burnapp[2], D. Idowu[1], S. Jandu[3], D. Makanjuola[4], S. Moore[3], A. Sharif[3], L. Silas[5], P. Storey[1]
[1]Communications, Kidney Research UK, Peterborough, United Kingdom; [2]NHS Blood and Transplant , Bristol, United Kingdom; [3]Renal Unit , University Hospitals of Birmingham, NHS Trust, Birmingham, United Kingdom; [4]SW Thames Renal & Transplantation Unit , Epsom and St Helier University Hospitals NHS Trust, London, United Kingdom; [5]Renal Unit, Guys & St Thomas NHS Trust, London, United Kingdom

Background

While kidney transplantation is the best treatment option for improved quality of life and longer-term survival for adults in ESKD, the number of Black, Asian & Minority Ethnic (BAME) patients accessing Living Donor Kidney Transplantation (LDKT) is substantially lower compared with white patients. Research has identified many barriers including recipients' reluctance to initiate conversation.

Methods

Home- based education has been effective in increasing living donation awareness and evaluations in BAME communities in the USA & Netherlands. Combined with another proven intervention, Peer Educators (PEs) - patients from the target community with a passion for the subject and a natural empathy in terms of language, culture and donation experience. It is an evidence based model in effective engagement with BAME communities on donation issues (*Clinical Kidney Journal 2015)*.

Results

14 PEs are now registered volunteers of the two major renal transplant centres, having completed accredited training. Templates, policies and procedures have been developed to replicate this model including governance, safety and confidentiality. Over the final months of the pilot, we will measure: 1) Expressions of interest from patients/their families about LDKT; 2) Home visits- uptake; 3) Experience of patients, potential donors, the multi-disciplinary team and PEs.

Conclusion/Application to practice

Mistrust exists within BAME communities towards healthcare professionals (HCPs), but a collaborative approach between PEs and HCPs is likely to be better received. This pilot study testing an innovative UK approach in engaging with BAME communities on LDKT, working in partnership at grassroots level, will help to inform best practice in this area and increase LKDT.

Disclosure: No conflict of interest declared

O-P 34

Effect on blood pressure and interdialytic weight of planned education in patients receiving haemodialysis

M. Mollaoglu[1], E. Başer[1]

[1]Cumhuriyet University, Sivas, Turkey

Background

Diet can improve the health and therapeutic effectiveness for patients with renal failure. However, it seems that many patients are not fully aware of diet and fluid intake restrictions.

Objectives

This study was conducted for the purpose of examining the effect on interdialytic body weight (IDWG) and blood pressure (BP) of planned education related to salt and fluid restricted diet given to patients undergoing haemodialysis.

Methods

The method of the study was a randomly controlled clinical trial. A sample of 100 individuals participated, of which 50 were in the Experimental group (EG) and 50 were in the Control group (CG). The educational program consisted of three sessions between the educator and haemodialysis patients (HP). Diet education, including face to face training with instruction booklets, were conducted in the three sessions. Having carried out the educational program, BP and IDWG were measured and recorded by researcher-designed checklists. Analyses were performed using SPSS version 16.0 statistical software.

Results

In the analysis of the difference between means of the EG and CG, after the third education program, statistically significant differences were found between BP, IDWG and creatinine level. The comparison of the individuals' pre-education IDWG, BP, creatinine and BUN mean values indicated no statistically significant difference between the EG and CG for any of the biochemical values ($p < 0.05$).

Conclusion/Application to practice

These findings have implications for the care of HP. Based on these results, it is recommended that continuous planned education be given to HP to achieve and maintain normal interdialytic body weight and blood pressure.

Disclosure: No conflict of interest declared

O-P 35

Achieving phosphate control in a haemodialysis clinic through enhancing patients knowledge

A. Mooney[1]

[1]Dialysis, B Braun Wellstone, Galway, Ireland

Background

Hyperphosphatemia is a major complication of kidney failure. It is linked to increased hospitalisation, cadiovascular disease and decreased mortality. Furthermore, maintaining serum phosphate levels within the recommended guidelines is crucial in haemodialysis units.

Recent studies reveal that target serum phosphate levels are not achieved in many clinical practice areas as recommended by evidence based practice. This is evident in the haemodialysis unit the author works in. It was then decided to produce an information leaflet for patients on phosphate levels.

Objectives

The author hoped to create an information leaflet on phosphate control for patients.The aims and objectives of the information leaflets was to enhance patient's knowledge and improve serum phosphate levels.The author hoped to increase motivation and self control.

Methods

The information leaflet was developed in haemodialysis in conjunction with members of the multi-disciplinary team. At the multi-discplinary team meeting a draft format was presented for review and critical appraisal. Nurses working in the hemaodialysis unit distributed information lealfets to patients. Nurses provided ongoing education and support on the control of high phosophate levels.

Results

Clinical audits were carried out to evalaute the effectiveness of the information leaflet every month after initiation to assess for improvements in serum phospahte levels amongst patients.

Conclusion/Application to practice

Serum phospahte levels improved dramatically in the haemodialysis patient population following the production of the information leaflets. It is evident that nurses play a vital role in phopshate control. Although the multi-disciplinary team have an important role in ongoing education, renal nurses are in a prime position to educate patients on phosphate control.

Disclosure: No conflict of interest declared

O-P 36

Development and implementation of a haemodialysis initiation program

I. Edri[1], B. Falk[1]

[1]Nephrology, Barzilai Medical Center, Ashkelon, Israel

Background

Chronic haemodialysis treatment is stressful for patients and their families. In order to achieve a successful integration of the patient and his family in the dialysis unit, to reduce stress levels, to ensure the new patient's safety, and to create mutual trust and cooperation between the patient and the staff, an organized patient education program can be of critical importance.

New patients may be confused, and unable to absorb information due to their emotional situation and the considerable amount of information they need to understand.

Objectives

Dividing an educational program into four sessions and adding visual aids can improve comprehension, enable clarifications, and make the initiation into the dialysis unit a more pleasant experience.

Methods

An experienced team of dialysis nurses created such a program. They reviewed the literature, selected topics, created the tools and a training film, and divided the presentations into four sessions.

The team proceeded to instruct the entire nursing staff on how to carry out the new program. New patients were guided in their first three dialysis treatments by a nurse, who documented the training and recommended how to continue training. In the fourth session patients watched the film which reviewed the topics and concluded the training.

Results

The patients and their families were satisfied. They were receptive to the training and gained experience of four dialysis treatments during the training, which clarified more issues.

Conclusion/Application to practice

We conclude that an educational program with visual aids and delivery divided into four initial dialysis sessions is effective. These findings need quantification.

Disclosure: No conflict of interest declared

O-P 37

The effect of chronic care model based education on disease management in hypertensive patients

G. Konakci[1], A. Durmaz Akyol[1], H. Töz[2]

[1]Faculty of nursing, Ege University, İzmir, Turkey; [2]Department of nephrology, Ege University, İzmir, Turkey

Background

The World Health Organization has estimated that high blood pressure causes one in every eight deaths, making hypertension the third leading killer in the world. Globally, there are one billion people with hypertension and four million people die annually as a direct result of hypertension. In the Eastern Mediterranean Region specifically, cardiovascular diseases and stroke are becoming major causes of illness and death.

Objectives

This randomized, controlled and half experimental study in hypertensive patients, in a “time-track” model is based on E. Wagner’s “Chronic Disease Model”. It uses planned training and identifies impact on hypertension management and quality of life.

Methods

The research has been conducted in Ege University Faculty of Medicine Nephrology Policlinic, between December 2012 and April 2016. Paramaters such as age, gender, education are investigated. Patients are selected by simple randomized sampling. A total of 30 hypertensive patients are included - 15 are intervention and 15 are control group patients.

Intervention patients have received a 6 month education and follow-up program, which is based on the “Chronic Disease Model” and includes personal interviews, telephone communications, group meetings, biochemical and metabolical evaluations, dietician, psychiatrist, internal medicine specialist doctor and specialist nurse evaluations, Patient Education Booklet prepared solely for this process and constructed web based patient education, as well as password protected electronic patient records access platform for patient care crew. Control group patients have continued routine follow-ups.

Data has been collected at baseline, 3 and 6 months with repeated measurements.

Results

There was no significant statistical difference between groups at baseline

Statistical meaningful differences have been determined in measurement change mean values between the groups and at three different intervals within same groups in disease based data (mean arterial blood pressure, HbA1C, fasting blood glucose level, waist circumference, body weight, body-mass index), Level of Knowledge about Hypertension Data Form, Measurement of Evaluation of Chronic Disease Care Patient Form sum and 5 sub-scale scores average, WHOQOL-BREF(Tr) Form for Measurement of Quality of Life scrores average values, at 3 and 6 months.

In the last month of the study one patient received additional medical therapy because of neuropathy and high blood glucose level, another patient has undergone coronary angiography. No comorbidity has been identified in the intervention group patients additional to beginnig diagnoses.

Conclusion/Application to practice

The application of education and a follow-up program based on the “Chronic Care Model” elicited improvement of quality of life, improvement of metabolic values, increase of knowledge levels and a positive change of chronic disease management satisfaction in hypertensive patients in 6 months period.

Disclosure: No conflict of interest declared

S 20 Parallel Session
The patient experience
Theatre Hall, 14:00-15:30

GUEST SPEAKER

Renal Art Groups

W. Johnston

Abstract is not available

O 26

Patient-centred outcomes: quality of life concerns reported by patients undergoing dialysis

J. Barros[1], C. Sales[2], R. Tavares[2], P. Mena-Matos[2, 3], A. Santos-Silva[4, 5], V. Miranda[1], E. Costa[4, 5], J. Fazendeiro Matos[6], M.T. Parisotto[7]

[1]NephroCare Maia, Fresenius Medical Care, Maia, Portugal; [2]Centre for Psychology at University of Porto (CPUP), University of Porto, Porto, Portugal; [3]Faculty of Psychology and Educational Sciences, University of Porto, Porto, Portugal; [4]Department of Biological Sciences, Faculty of Pharmacy, University of Porto, Porto, Portugal; [5]UCIBIO@REQUIMTE, University of Porto, Porto, Portugal; [6]NephroCare Portugal, Fresenius Medical Care, Porto, Portugal; [7]Care Value Management, Fresenius Medical Care, Bad Homburg, Germany

Background

Maximising patients' quality of Life (QoL) is an important healthcare outcome, along with improving clinical outcomes (e.g. survival, hospitalisation). Usually QoL assessment involves standardised questionnaires, covering various, preselected life domains. This preselection limits patients' possibilities to report their own most relevant aspects of well-being. Moreover, QoL questionnaires, developed in younger populations, underestimate the elderly chronic population QoL specificity. End-stage renal disease (ESRD) patients on dialysis, represent such a population.

Objectives

To assess the QoL aspects of elderly on dialysis.

Methods

Cross-sectional study with 97 ESRD patients (39.2% males; 69.86±14.03 years old) on regular dialysis 3 sessions a week. Patients filled in the Psychological Outcome Profiles (PSYCHLOPS), which is a one-page individualised questionnaire asking patients to indicate in their own words up to two most relevant problems and one functionality issue caused by those problems.

Results

Thematic analysis of 156 answers revealed that physical health and symptoms (25.6%) were the most frequent reported domains, followed by concerns within the family domain (16.0%) hindering treatment aspects (9.6 %), not being able to handle domestic tasks (12.2%), negative impact on work performance (7.7%), difficulties on walking (7.0%), loss of autonomy (6.4%), and loneliness (2.6%).

Conclusion/Application to practice

In conclusion, our patients undergoing dialysis see their well-being affected by a broad range of non-clinical factors. As compared to other domains, survival is one of the less indicated issues. Managing the disease and treatment negative impacts within the family is one of the most important patient priorities. Therefore, QoL assessment and care in this population should include the family dimension.

Disclosure: No conflict of interest declared

O 27

“I came here to try to get better.” Patients' experiences of acute renal failure

H. Crona[1]

[1]Njurmedicinska kliniken, Danderyds sjukhus AB, Stockholm, Sweden

Background

Background

According to Swedish law, the healthcare staff in Sweden must give the patient information that he or she can understand, and allow him or her to be involved in their care. Since symptoms and signs of acute kidney failure can appear late in the disease course, the patients do not always understand why hospitalization is necessary so the importance of information is great.

Objectives

Objective: The aim of this work was to describe patients’ experiences of information and participation in care when suffering from acute kidney failure.

Methods

Methods: Fourteen inpatients suffering from acute renal failure were interviewed. The interview texts were transcribed verbatim and then analyzed using qualitative content analysis according to Patton inspired by Graneheim and Lundman. The findings were discussed vis-a-vis the Person Centered Care framework.

Results

Results: Three main categories were identified; the ability to familiarize oneself in a new situation, the importance of being seen and heard and the opportunity of influencing one’s health and one’s own recovery. They were linked together under the theme Dialogue creates security and satisfaction. Each patient's experience of information received and of participation when suffering from acute kidney failure was unique. A dialogue was needed in order to create security and satisfaction.

Conclusion/Application to practice

Conclusion/application to practice.

Practicing person centered nursing was an appropriate way to meet each patient’s unique needs for information and participation.

Disclosure: No conflict of interest declared

O-P 38

Implementation of an in-centre self-care haemodialysis programme

M. Mateus[1], T. Silva[1], F. Leitao[1], J. Fazendeiro Matos[2], M.T. Parisotto[3]

[1]NephroCare Portimão, Fresenius Medical Care, Portimão, Portugal; [2]NephroCare Portugal, Fresenius Medical Care, Porto, Portugal; [3]Care Value Management, Fresenius Medical Care, Bad Homburg, Germany

Background

Many patients on haemodialysis complain about a loss of control over their lives. Daily living with a chronic illness is a devastating feeling that often leads to a lack of motivation, low self-esteem, and poor quality of life. The feeling of helplessness and loss of control as well as an inherent sense of dependence is inevitable. Studies demonstrate that people who are actively involved in their treatment taking direct responsibility for their care achieve and sustain better clinical outcomes. Against this background, an in-centre self-care haemodialysis programme was implemented in our unit.

Objectives

- To describe the implementation and the setup of the self-care haemodialysis program;
- To identify the benefits for the patient;
- To identify the impact on the patient's treatment.

Methods

We conducted a case study and the semi-structured individual interview in order to evaluate the patients' experiences with the auto-dialysis program.
The operational phase of the 4-stage program began in July 2016.

Results

Patients showed a positive development in the program carrying out various tasks evaluated in the Checklist of competencies. Benefits include autonomy, independence, self-care, relationship with the multidisciplinary team, motivation, and consideration of the patients' own rhythm.

Conclusion/Application to practice

Patient empowerment creates a context enabling patient independence; providing a sense of control of their lives and reinforcing the process of education with regard to the dialytic process, which can, in turn, have a positive impact on the overall state of health.

Disclosure: No conflict of interest declared

O-P 39

Quality of life of patients undergoing haemodialysis

A. Kavalieratou[1], G. Garofyllou[1]

[1]Haemodialysis Unit, Konstantopoulio G. H. N. Ionia, Athens, Greece

Background

Chronic Renal Failure (CRF) is a chronic disease, which has a negative impact on the quality of patients' life. The study of factors affecting the quality of life of these patients is necessary to investigate the impact of the disease at a biological, psychological and social level.

Objectives

The purpose of this research study was to investigate the satisfaction of patients undergoing chronic haemodialysis and their perceptions of their quality of life.

Methods

The study sample consisted of patients undergoing chronic haemodialysis at a Dialysis Unit in Athens. The study lasted from January 2016 to March 2016. To measure the health related quality of patients' life, the Greek version of the questionnaire WHOQOL-BREF of the World Health Organization was used. The completion of the questionnaires was made by the method of the structured interview. A total of 70 questionnaires were completed.

Results

According to the results, most of the patients considered the quality of their life as good (48.6%), while the 8.5% described it as bad or very bad. The lowest satisfaction rates were associated with issues of physical health and independence with mean (12.89 ± 2.23) and the highest with social relations (14.68 ± 1.50).

Conclusion/Application to practice

The effect of Chronic Renal Failure on the physical, psychological and social background of patients on dialysis is an essential factor in creating a tailor-made holistic treatment program, adjusted to the specific needs of each patient.

Disclosure: No conflict of interest declared

O-P 40

Renal patients' symptoms, experience and quality of life in their last year of life

A. Bonner[1, 2], S. Chambers[1], H. Healy[2, 3], W. E. Hoy[4], G. Mitchell[5], A. Kark[2], S. Ratanjee[2], P. Yates[1, 6]

[1]School of Nursing, Queensland University of Technology, Brisbane, Australia; [2]Kidney Health Service, Metro North Hospital and Health Service, Queensland Health, Brisbane, Australia; [3]Kidney Research Laboratory, Queensland Institute of Medical Research, Brisbane, Australia; [4]Centre for Chronic Disease, University of Queensland, Brisbane, Australia; [5]Primary Care Unit, University of Queensland, Brisbane, Australia; [6]Centre for Palliative Care Research and Education, Queensland Health, Brisbane, Australia

Background

It is important to assess the most troublesome symptoms and quality of life (QOL) in patients with chronic kidney disease (CKD) who are in their final year of life.

Objectives

To measure advanced CKD patients' troublesome symptoms and QOL.

Methods

An observational, prospective design was used to follow 19 CKD patients for up to 12 months. Inclusion criteria: aged ≥18 years, prognosis <12 months (surprise question), English speaking, and cognitively sound. The measures used were the Modified Dialysis Symptom Index, (combining severity and bothersome scores), the Functional Assessment of Chronic illness Therapy Palliative-14 (FACIT-PAL), and the Assessment of Quality of Life 6 Dimensions (AQoL6D). Data were collected at study entry and then 3 monthly to the patients' death or study end.

Results

Participants had a median age of 78 years (range 42-90), most were male (63%), 10 were receiving dialysis, and 7 died during the study. While fatigue, dry skin, dry mouth, and bone or joint pain were the most prevalent symptoms across time-points, the most troublesome symptoms were sex and sleep problems, muscle soreness, and breathlessness. Median FACIT-PAL scores fluctuated little over time (range 43.5–46). AQoL6D scores remained largely unchanged (Means 0.66 [SD 0.19] to 0.75 [SD 0.2]) although were lower than health population norms (Mean 0.84 [SD 0.16]).

Conclusion/Application to practice

Regular assessment for troublesome symptoms is warranted.Functional and QOL findings may indicate the slow decline over time with patients becoming accustomed to their limitations. Integrated supportive care programs may help to further ease symptom burden in the last year of life.

Disclosure: No conflict of interest declared

O-P 41

The effect of acupressure on severity of thirst and quality of life in haemodialysis patients

A. Yildirim[1]

[1]PhD Candidate and Staff Member at Nursing, SELÇUK ÜNİVERSİTESİ, KONYA, Turkey

Background

Thirst and dryness of the mouth are among the most common problems of individuals receiving haemodialysis treatment.

Objectives

This study was carried out in a randomized-controlled way to define the effect of acupress on thirst intensity and quality of life, performed on CV-23, SJ-17 and Kid-1 acupuncture points for 15 min three times a week for 6 weeks in patients on haemodialysis.

Methods

This study was performed quantitative and qualitative. In quantitative phase of study was carried out to define the effect of acupress on thirst intensity and quality of life, performed on CV-23, SJ-17 and Kid-1 acupuncture points for 15 min three times a week for 6 weeks in patients on haemodialysis. In qualitative phase of the study was performed by using an individual interview technique and a semi-structured question form with the intervention group patients before and after the acupressure in the study. The study was completed in two haemodialysis centers with 60 patients in total: 30 in the intervention group and 30 in the placebo group. Ethics committee approval, informed consent from volunteers and institutional permissions were obtained for the study. Research data were obtained using patient introduction form, Visual Analog Scale (VAS)-thirst scale, Kidney Disease Quality of Life Scale, acupressure application chart, and application charts of intervention and placebo groups.
In line with the acupressure application protocol, acupressure was applied to individuals in the intervention group while the acupressure device was in operating state and to individuals in the placebo group while it was in non-operating state for a period of 15 minutes on CV-23, SJ-17 and Kid-1 acupuncture points during each dialysis session three times a week for 6 weeks. T test, Post-Hoc test: Bonferoni, ANOVA, Chi-square and Pearson's correlation analysis test were used in the evaluation of the data.

Results

The weekly increase in the saliva amount and the weekly decrease in the VAS thirst level in the individuals from the intervention group compared to those from the placebo group were found to be significant ($p<0.05$). In the 1st and the 6th week surveillances the difference between the intervention group and the placebo group in terms of the mental component sub-dimension of the Quality of Life scale was found to be significant ($p<0.05$). The patients reported that there is a decrease in thirst, increase in salivation and they are satisfied with the application and they feel better after the acupressure application.

Conclusion/Application to practice

As a result of the study, it was determined that the acupressure applied to CV-23, SJ-17 and Kid-1 acupuncture points with the acupressure device increased the saliva amount, decreased the severity of VAS thirst and had no effect on other dimensions of the quality of life except the mental component sub-dimension. According to this result, to patients with haemodialysis the acupressure can be suggested as an integrated application that increases the amount of saliva and decreases the severity of thirst.

Disclosure: No conflict of interest declared

S 21 Parallel Session
Transplantation
Auditorium Hall, 16:00-17:30

GUEST SPEAKER

Simultaneous pancreas-kidney transplantation: Managing nursing practice challenges

M. Hreńczuk[1]

[1]Department of Nursing Surgery, Transplantation and Extracorporel Tritment, Faculty of Health Since, Medical University of Warsaw, Warsaw, Poland

Background

Simultaneus pancreas-kidney transplantation (SPKTx) is performer in end-stage renal disease in patients witch type 1 diabetes. A recipient is usually a dialysed patient. The own-year and five-year patients survival rate of SPKTx is currently 95 and 90%.

Objectives

The aim is to characterize the patient undergoing the SPKTx procedure and to draw conclusions about nursing practice.

Results

The process of preparing the patient for transplantation of the pancreas and kidney does not depart from the qualification procedure for renal transplantation, apart from particularly profound diagnostics in the field of cardiovascular assessment and coagulation disorders.

The surgical procedure includes transplant of the two organs, while direct postoperative care provided by the nursing staff should be comprehensive. It should be composed of evaluation of recipient's condition and functioning of the kidney, as well as therapeutic activities.

After surgery, patients require close monitoring of vital signs, particularly the level of blood glucose, diuresis, fluid balance, laboratory tests were performed and analysed, Doppler ultrasound tests of the transplanted organs were performed, pharmacotherapy was used, including immunosuppressive drugs, analgesic management and an appropriate fluid therapy. Long-term care of the recipient of the two organs includes evaluation of the general condition of the patient and functioning of the transplanted organ, monitoring, immunosuppressive treatment and treatment of secondary diabetes complications.

Conclusion/Application to practice

Nursing care delivered to recipients of pancreas and kidneys should be comprehensive and multidirectional, requires specialized preparation and knowledge of the field surgery, transplantology, nephrology and diabetology, and in the early postoperative period also anesthesia.

Disclosure: No conflict of interest declared

O 28

The person's experiences after renal transplant rejection

M. Calado[1], M.N. Cerejo[1], C. Marchao[1], J. Fazendeiro Matos[2]

[1]NephroCare Entroncamento, Fresenius Medical Care, Entroncamento, Portugal; [2]NephroCare Portugal, Fresenius Medical Care, Porto, Portugal

Background

Stage 5 Chronic Kidney Disease (CKD) is characterised by the irreversible loss of kidney function requiring renal substitutive therapy by haemodialysis, peritoneal dialysis, or renal transplantation as the only possibility to maintain the patient's life.

Objectives

To understand and identify stage 5 CKD patients' experiences of dialysis:

- at the moment of transplant news
- after rejection of the renal transplant
- suffering from transplant rejection and resuming haemodialysis.

Methods

We enrolled seven patients on haemodialysis in this qualitative, exploratory-descriptive and transversal study in accordance with the inclusion criteria (after renal transplant rejection).

Results

If the patient is informed that a kidney transplantation becomes necessary, a chapter of his/her life comes to an end. Emotions range from surprise, happiness/joy to fear/reluctance. After the transplantation, the patient experiences feelings of well-being and independence of dialysis machines and the restoration of the sense of autonomy. Transplant failure causes much suffering due to the deterioration of the patient's quality of life. Awareness of transplant failure led to acceptance followed by the hope for a new transplantation. We identified feelings of sadness, discomfort and lack of independence in the category of readjustment to haemodialysis. However, patients accept the need for dialysis as the only way to prolong their lives.

Conclusion/Application to practice

After transplantation, patients perceive freedom, change to a normal life, personal and social and professional well-being, and master of their life and independence. Prerequisites for the readjustment to haemodialysis after renal transplant rejection are that the patient accepts and is aware of the need for haemodialysis therapy to survive.

Disclosure: No conflict of interest declared

O 29

Frailty in potential kidney transplant recipients

M. Vera Casanova[1], A. Bach Pascual[1], Y. Castillo Piña[1], S. Álvarez Morales[1], M. Folgueiras Lopez[1], M. J. Pérez Sáez[1], D. Redondo Pachon[1], T.M. Ho Wong[1], A. Faura Vendrell[1], E. Junyent Iglesias[1]

[1]Nefrologia, Hospital del Mar - Parc de Salut Mar, Barcelona, Spain

Background

Frail patients develop a higher rate of complications after kidney transplantation (readmissions and mortality) than nonfrail ones. At present, patient's waitlisted for kidney transplant are increasingly older and having more comorbidities. Characterisation of frailty and the development of personalised strategies in this population may improve outcomes.

Objectives

We aimed to assess frailty in our kidney transplant waiting list to characterise the patients in order to design a personalised care plan.

Methods

We performed a prospective study of patients included in the kidney transplant waiting list from September 2016 to January 2017. The Frailty Score defined and validated by Fried was used to assess the patients, classifying them into nonfrail, intermediately frail and frail. Other clinical and analytical data, validated morbility and Quality of Life tests were also collected.

Results

116 patients were included. Mean age was 64.7±10.2 years, 34.2% were men and mean BMI was 28.1±5.9 Kg/m^2. Medium time on dialysis was 14.8 [5-21.5] months. We identified and labeled 11.6% of patients as frail and 31.3% as intermediately frail. Frail patients were mostly female (90% vs 34.2%, p=0.001), diabetics (60% vs 30.4%, p=0.062) and dependent to daily basic activities (70% vs 3.8% with Barthel <100, p<0.001). Both groups were similar in mean age, education, family support, instrumental daily activities and risk of depression.

Conclusion/Application to practice

A very important proportion of patients (43%) in our waiting list for kidney transplant have some grade of frailty. The characterisation of this population is crucial for the elaboration of strategies in order to improve outcomes after transplantation.

Disclosure: No conflict of interest declared

O-P 42

Challenges and risks of chronic hepatitis C infection therapy in kidney transplantation

D. Ćosić[1], S. Klačinski[1], V. Furić-Čunko[1], N. Bašić-Jukić[1]

[1]Department of Nephrology, Arterial Hypertension Dialysis and Transplantation, University Hospital Centre Zagreb, Zagreb, Croatia

Background

Treatment options for chronic hepatitis C infection in patients with transplanted kidneys were reduced prior to the development of interferon-free therapy. This novel treatment seems very efficient.

Objectives

Here we report our experience in treatment of patients with chronic hepatitis C prior and after kidney transplantation.

Methods

Clinical data and laboratory results have been recorded from patients with chronic hepatitis C that have received a kidney transplant. We monitored the clinical course, full blood count, liver, kidney function and HCV RNA levels.

Results

From a total of 1880 kidney transplant patients in our department, 101 had HCV infection, 5 of whom were re-transplanted. Fourteen of these patients have received pegylated interferon therapy prior to transplantation (2 with ribavirin). The efficacy of treatment was 40%. Interferon-free therapy was conducted in the past year in 3 patients with 100% efficacy. Two patients had fatigue and headache as side effects and one had hypertension with fluid retention. All of our patients had normal hepatic enzymes and CBC levels, while creatinine was increased in 1 patient. HCV RNA was undetectable in week 4 and 12 during and 4 weeks after the interferon-free therapy.

Conclusion/Application to practice

Multidisciplinary team collaboration is needed in the overall care of kidney transplant patients. This includes intensive monitoring by a transplant nephrologist during and after treatment. The nurse's role in this team is to organize tests, educate patients, give psychological support and to recognize and prevent possible complications.

Disclosure: No conflict of interest declared

O-P 43

Role of dialysis nurses in managing kidney transplant patients on the waiting list

J. Terényi[1], M. Molnár[1]

[1]Dialysis Centre, Fresenius Medical Care, Szigetvár, Hungary

Background

Kidney transplantation provides many advantages over haemodialysis, including higher independence of patients. As fewer donor organs are available than requested, it is challenging to get registered on the transplant waiting list.

Objectives

This stady showes the role of nurses in the registration of candidates and in the management of follow-up examinations of active waiting list patients.

Methods

One of our nurses was designated to coordinate patient examinations required for the registration on the list. This includes collecting the results of all tests and examinations, organising the required follow-ups of waiting patients to remain on the list, and keeping patients and their family up to date. The nurse keeps contact to the Regional Coordinator and Transplantation Committee as well as patients and their family after successful transplantation.

Results

Over the last decade, the responsible nurse participated in the recruitment of 40 kidney transplant candidates, of whom 16 were registered for the second or third time. The nurse provided assistance to 48 patients who were on the list for a long time in organising all necessary examinations, collecting examination results, and referred patients to further examinations requested by the Committee. She also contributed to place 3 candidates, who were also waiting for a pancreas-kidney transplant, on the list.

Conclusion/Application to practice

It is important to designate nurses to manage objectives of the list. Their tasks are to provide, support, arrange transplant registrations, and coordinate examinations of all transplant candidates. This might support patients eligible for a kidney transplant to get on the list within a short period of time.

Disclosure: No conflict of interest declared

O-P 44

Preparation for kidney transplantation from the patient's perspective

N. Graho[1], B. Ivičinec[1], J. Osmanagić[1], E. Jazvić[1]
[1]Dialysis, General hospital "dr.I.Pedišić", Sisak, Croatia

Background

Kidney transplantation is the best form of treatment for CKD. Any potential recipient needs to process in detail before the transplantation, prepare and if it is necessary to treat the diseases that might affect his survival. Invasive tests in preparation for transplantion are the primary causes of fear and often of dropping out of the process.

Objectives

To determine the attitudes of patients towards the transplantation
To establish the reasons for not joining the process of transplantation

Methods

The study was conducted in the dialysis centre of the General Hospital, Sisak, Croatia in October 2016. The study included 43 patients, filling out an anonymous questionnaire.

Results

- 51% of patients attended pre-dialysis education
-since they started dialysis treatment, 51% of patients receive initial feedback about the transplantation within 6 months and 49% within 3 months
-64% of patients who are currently in the process of transplantation, claim that the crucial factor in the decision to start treatment was the potential quality of life
-67% of patients cited fear of invasive tests as a reason for not joining the process of transplantation list, while 33% cited fear of transplantation complications
- for 64% of patients the most demanding procedures are colonoscopy and gastroscopy

Conclusion/Application to practice

From the collected data, it is evident that fear, especially of invasive diagnostic procedures, is the main reason for the abandonment of processing for transplantation. Multidisciplinary approach is important for successful preparation of patients for the transplantation.

Disclosure: No conflict of interest declared

S 22 Parallel Session
Open Forum
Theatre Hall, 16:00-17:30

GUEST SPEAKER

Acceptance, Choice & Empowerment for pre-dialysis patients: A Peer Educator collaborative project

N. Jain[1], M. Ali[1], A. Dodds[2], P. Storey[1], J. Baharani[2]
[1]Communications, Kidney Research UK, Peterborough, United Kingdom; [2]Renal Unit, Heart of England NHS Trust, Birmingham, United Kingdom

Background

There are a disproportionate number of patients receiving haemodialysis compared to peritoneal dialysis despite self –care renal replacement treatment being associated with improved quality of life and cost savings.

Objectives

To pilot an innovative collaboration between Peer Educator/Kidney failure support nurse approach - to provide support and information for pre dialysis patients in order to enhance the patients' understanding, decision making and empowerment.

Methods

The Kidney Research UK and Heart of England Foundation NHS Trust collaboration is a UK first pilot project. Through the Charity's leadership, we are using our evidence-based and multi award winning Peer Educator (PE) approach in an innovative way. Trained (accredited) members of the target audience – themselves patients and carers (the Peer Educators) in true partnership with kidney nurses, undertaking home visits and clinics to enhance the information, support and decision-making process for pre-dialysis patients.

Results

The project team provide effective leadership through the Peer Educator Coordinator and Project Manager, with volunteers remaining passionate and effective. Standard operating procedures have been developed to support sustainability.

Conclusion/Application to practice

Outcomes include: "The support of a Patient Peer Educator allowed me to get through to a lady…. who previously wasn't accepting her diagnosis and need for treatment." (Lead nurse).
The Clinical Lead said: "*The Peer Educators have built and abridged the gap in trust between Patients and Clinicians*"
Through questionnaires and focus groups, there has been overwhelmingly positive feedback from patients, Peer Educators and the renal unit staff.
The team is now exploring further sharing and spreading to other sites.

Disclosure: No conflict of interest declared

O 30

Oral hygiene and health among haemodialysis patients

A. Kliś[1], T. Irzyniec[2], B. Jarczewska-Głośnicka[2]

[1]Szpital Wojewódzki, Bielsko-Biała, Poland; [2] Silesian Medical University, Katowice, Poland

Background

Dental and oral cavity diseases are common problem among patients with chronic kidney disease (CKD). CKD leads to the fast progress of caries and periodental diseases. Oral health is also deteriorated by inadequate hygiene. The consequence is dysfunction of the chewing apparatus and improper nutrition, which impairs the quality of life and leads to malnutrition.

Objectives

The assessment of behaviors related to oral hygiene for hemodialysed patients and clinical evaluation of their oral health.

Methods

49 haemodialysis patients from Bielsko-Biała were examined by dentist. The research material was also collected by means of author's questionnaire, blood tests results.

Results

The resalts of this stady shows

75,51% of patients reported a problems with oral health, which in most cases (81,63%) appeared to dialysis status. Approximal Plaque Index (API) indicated the average hygiene of interdental spaces and need improvement (68,27%). Inssuficient oral hygiene (Oral Hygiene Index – OHI) was found in 24,49% of patients. Contrary to the assumptions only 18,37% of patients reported bleeding gums during brushing teeth, as confirmed Sulcus Bleeding Index (SBI) – 36,22%. More than 10 teeth were removed due to caries over a half of patients.

The majority of surveyed (59,18%) brushed teeth two times daily, while others hygienic oral treatments, such as flushing or flossing, made only 28,57%. More than a half of participants (53,06%) forgot to brush teeth before going to bed.

Conclusion/Application to practice

Oral health is getting worse with the start of renal replacement therapy. Most patient with inadequate oral hygiene and problems in oral health indicates the need for the education.

Disclosure: No conflict of interest declared

O 31

Approaching the “foreign” haemodialysis patients in the island of Lesvos

P. Trichou[1], M. Gerali[2], A. Roussos[3]

[1]Haemodialysis Unit, Vostanio General Hospital of Mitilini, Island of Lesvos, Greece; [2]Directory of Nursing, Children's Hospital "P&A Kyriakou", Athens, Greece; [3]Nursing Unit, Vostanio General Hospital of Mitilini, Island of Lesvos, Greece

Objectives

a) To describe the current situation in the island of Lesvos, during the years 2015-2016, following the arrival of large numbers of refugees; b) to explore whether economic crisis has affected the level of health services provision and to what extent it has turned into a values crisis.

Methods

A literature review was performed in electronic database “pub med”, with keywords diversity, immigrant, refugee, multiculturalism, crisis, coexistence, mutual respect. Statistics from the Hospital of Mytilene in the island of Lesvos were also used.

Results

a) Attendance at outpatient clinics, during the period 2015-16, exceeded 15000 refugees; b) the number of inpatients, during 2016, was 1440; c) during 2016, 70 refugees required renal dialysis for a total number of 280 sessions.

Health protection is a fundamental human right that must be guaranteed by the institutions without discrimination. The increased health care needs, due to the refugee crisis, have affected the operation of remoted hospitals. The fear of persecution, the financial cost, the ignorance of own rights, the cultural and language differences may impede the timely and effective access to health services. The removal of above obstacles could target at the protection of the refugees and the enhancement of host health system.

Conclusion/Application to practice

Further efforts are required to protect sensitive population groups, like refugees, from exclusion, because of the economic crisis. The conscious and responsible health professional should respect and appreciate anybody looking different. The example of Lesvos can act as a proof that we do not lead a values crisis.

Disclosure: No conflict of interest declared

O-P 45

Environmental impact of haemodialysis

C. Kurtz[1], E. Golland[1], J. Tolsgaard[1]
[1]Haemodialysis unit, Galilee Medical Center, Nahariya, Israel

Background

There are increasing numbers of patients worlwide requiring haemodialysis. Haemodialysis has significant impact on the environment through the consumption of natural resources and the production of large amounts of waste. Increased numbers of treatments increases the environmental impact. Despite this, there is a lack of attention to environmental concerns.

Objectives

To implement improvements in our large haemodialysis unit; to change staff habits to ones more friendly to the environment and to increase awareness of the environmental impact of haemodialysis in easy to implement low resource steps.

Methods

Implementation of a program that included:
1. Recycling of 5 litre plastic containers.
2. Re-use of dialyzers for water purification.
3. Exchange of Styrofoam packaging of meals by reusable trays.
4. Setting dialysis flow rates automatically to 1.5 times the blood flow rate.
5. Installation of a more efficient water purification system.

Follow up to ensure changes implemented are being performed as planned, adjusting changes according to need.

Results

Every month 1440 plastic containers are sent to recycling instead of the trash. 850 meals are provided on reusable trays. Water is saved when the dialysis machines are not in use by the replacement of continuous water circulation with short rinses, and reduction of RO waste water.

Conclusion/Application to practice

There are many possibilities to implement changes friendly to the environment even in large organizations without the resources for overhauls. Small changes can greatly reduce the amount of waste produced in a haemodialysis unit. Periodic assessments are necessary to see what adjustments are possible to reduce the environmental impact.

Disclosure: No conflict of interest declared

O-P 46

Use of smart technology in haemodialysis

C. Popescu[1]

[1]Medical, Fresenius Medical Care, Bucharest, Romania

Background

In 2015, smart software was integrated into the electronic database system in some clinics of a dialysis network. This application intends to improve the management of anaemia medication.

Objectives

To optimise drug prescription to manage secondary anaemia in CKD stage 5 patients.

Methods

The monthly laboratory test results are entered into the database system. The anaemia management application analyses each patient's data, evaluates how to maintain haemoglobin and ferritin levels within the target range [haemoglobin (10-12) g/dl, ferritin (450-650) µg/l]. The application predicts and suggests the best erythropoietin-stimulating agent (ESA) / Iron drug therapy including dosage and scheduling. Physicians can either issue the prescription according to the software indication or based on their personal experience.

Results

With more than 80% of ESA and Iron, the suggestions of the drug software were confirmed by the physician, the clinic achieved very good results in terms of haemoglobin level and drugs consumption. 74.4% of the patients were on target regarding haemoglobin values (10-12 mg/dl) in September 2015 and 88.6% in October 2016, respectively. At the same time, ESA consumption decreased from 1.17m/kg/month in September 2015 to 0.81 m/kg/month in October 2016.

Conclusion/Application to practice

The anaemia management application is a model based on real patient data and on physician experience. The integration of intelligent software into clinic processes can be a step ahead to maintain patient safety and improve patient outcomes while reducing costs. Advanced computer intelligence and modelling programmes can be used successfully as a smart support tool.

Disclosure: No conflict of interest declared

O-P 47

What is it like to live with haemodialysis for 30 years? A case report

Z. Švarcová[1]

[1]Dialysis unit, B. Braun Avitum s.r.o., - Homolka, Prague, Czech Republic

Background

A female patient I. K., born in 1966, started the haemodialysis therapy when she was an adolescent. At that time, naturally there was a change of perception of health and quality of life. The patient reviewed her priorities. Over the time, the disease progressed and the patient developed complications of long-term dialysis treatment. This had a significant impact on overall mental health, self-esteem, family relationships and the role of the patient in the society. All these factors reflected in significantly increased demands on the patient's nursing care and psychological support from the staff in the dialysis centre and the need for frequent interventions of the coordinator for social care.

Objectives

To enable the patient to live a fulfilled quality life despite the fact that her condition was deteriorating significantly.

Methods

Consultation with a psychologist specializing in the care of dialyzed patients and a psychiatrist.
Creating specific goals of nursing care - primary nurse
Given the general condition, the patient required significant support in the social care services

Results

Despite the efforts of the nursing staff and the team in the dialysis centre, the overall condition failed to stabilise and patient’s quality of life continued to deteriorate.

Conclusion/Application to practice

Due to gradual progression of the disease there was deterioration of the general condition of the patient - mentally and physically. Therefore, the priority effort of the nursing staff in our centre has been to alleviate the patient’s symptoms, to change her perception of the current situation and to maintain at least the current quality of life.

Disclosure: No conflict of interest declared

O-P 48

A n ew approach in our outpatient clinic for chronic kidney disease

S. Pečolar[1], F. Kogal[1]

[1]Dialysis, Splošna bolnišnica Slovenj Gradec, Slovenj Gradec, Slovenia

Background

Chronic kidney disease (CKD) is a big burden for patients, families and also for healthcare budgets. According to literature there is high rate of hospitalizations, cardiovascular events and death in patients with CKD stage 4 and 5. Medical staff should work closely with this patients. We need transparency of outcomes, national registry of CKD patients and integrated IT solutions.

Objectives

It's important to empover patients to take well informed decisions and take an active part in their treatment. In CKD outpatient clinic we have start a process of early proactive program detection and referal, management, treatment and care for CKD patients with nurse-educator, and new aplicative program for CKD.

Methods

We compared two types of care for CKD patients-"classic outpatient clinic" and proactive approach where nurse-educator is involved.

Results

Our research showed significant differences in progress of CKD (-2,88 oGFR/year versus -0,57 in proactive approach). Use of epoetin was also significantlly lower (2447 IE versus 837 IE) with a big decrease in number of hospitalizations ($p<0,01$).

97% of patients attended pre-dialysis education program in both clinics. More patients in CKD proactive clinic chose peritoneal dialysis as their renal replacement therapy (20-50% in last 6 years). This shows that patients want to play a more active role in their treatment.

Conclusion/Application to practice

With process oriented approach, good communication, education, monitoring and audit you have low rate of hospitalization and use of epoetin. Patient satisfaction is higher and more patients want to take more active role in their treatment. IT technology can help us with register of CKD patient, analysis and better monitoring.

Disclosure: No conflict of interest declared

TUESDAY, SEPTEMBER 12, 2017

S 23 Plenary Session
Nutrition
Theatre Hall, 08:30-10:00

GUEST SPEAKER

The role of diet in Hypertension for the prevention and treatment of CKD

T. Eirini Sialvera

Abstract is not available

O 32

Benefits of a nutrition coordinator introduced to a dialysis centre

A. Neradová[1]

[1]Dialysis unit - Homolka, B. Braun Avitum s.r.o., Prague, Czech Republic

Background

Patients undergoing dialysis are at risk of high levels of phosphorus in the blood. These levels can be influenced not only by dialysis, but also by diet. In order to achieve success in the therapy, it is very important for the patient to adhere to dietary measures and appropriate use of phosphate binders.

Objectives

To achieve optimum levels of phosphorus in the blood in the largest possible number of patients included in haemodialysis and peritoneal dialysis program.

Methods

We have introduced the position of a nutrition coordinator to achieve maximum adherence to the diet in as many patients as possible, to process results of periodical samplings, to approach each patient individually for their education about their dietary regimen and the use of phosphate binders. Efficiency and effectiveness of implementation of this position was for a long time evaluated based on results of phosphorus levels in our patients. For three years, we have watched the dynamics of phosphorus levels. We saw a long-term positive trend in improving results of phosphorus levels in most patients.

Results

Most patients cooperated with the nutrition coordinator well and the percentage of patients achieving normal levels of phosphorus increased significantly

Conclusion/Application to practice

We recommend to use our experience with the introduction of this position in other dialysis centres, where a nutritionist
is not available. Costs for training of the specialised nurse are with regard to the benefit for the patients negligible. The right choice of the method aim plays a big role in the final success.

Disclosure: No conflict of interest declared

O-P 49

Bioelectrical impedance analysis as a tool for nutritional status evaluation in chronically ill patients

C. Krel[1], N. Piko[1], J. Tomazic[1], S. Bevc[1]

[1]Dept. of Nephrology, Clinic for Internal medicine, University Clinical Centre Maribor, Maribor, Slovenia

Background

Body mass index (BMI), serum albumin level and bioelectrical impedance analysis (BIA) are the tools most commonly used in assessing nutritional status of patients. Low phase angle (PhA) (men ≤5º, women ≤4.6º) by BIA is associated with increased nutritional risk and higher morbidity. The aim of our study was to evaluate different methods of nutritional status analysis in patients with variable chronic diseases, including chronic kidney disease (CKD).

Methods

We included 30 patients (mean age 70.8±17.2 years, 67% men, 93% with CKD) that were hospitalized in the Department of Nephrology of University Clinical Centre Maribor from November 1st 2016 to January 31st 2017. The inclusion criteria were the presence of a chronic disease (including CKD) and increased nutritional risk (≥1 fulfilled NRS 2002 criterion). We measured serum albumins with standard laboratory, BMI and performed BIA analysis with a body composition analyzer (Tanita, MC780).

Results

Mean serum albumin was 33.6±5.7 g/L, mean BMI was 25.6±4.4 kg/m^2 and mean PhA was 4.4±1.2º. No correlation between serum albumin and BMI was found. Lower PhA was associated with lower serum albumin (p=0.045). The nurses of our department performed a nutritional education of all the patients included in the study; those with low PhA received dietary supplements.

Conclusion/Application to practice

According to our results the PhA is reliable nutritional status marker and BIA should be the method of choice for detecting nutritional status abnormalities in long-term patients, including those with CKD. In case of lower PhA, patients should undergo a nutritional education and/or receive a dietary supplement.

Disclosure: No conflict of interest declared

O-P 50

The role of the nurse in preventing hyperphosphatemia in haemodialysis patients

A. Janus[1]

[1]Fresenius Nephro Care , Zabrze, Poland

Background

In the process of educating patient suffering from CKD, an important element is nutrition therapy. A correctly balanced diet notably contributes to restriction of possible complications. To enable a patient to take an active part in the treatment process by following a good diet, widely understood health education is necessary.

Objectives

The aim of the research was to evaluate the knowledge presented by the nephrological nurses in applying a diet, restricted to high-phosphate products by patients on haemodialysis.

Methods

160 respondents attended the study (157 K, 3M) aged between 23 and 62. It took place between November 2015 and February 2016, in the area of Silesian agglomeration. Male and female nurses took part in the study, hired in the wards of nephrology (49,375%) and extracorporeal dialysis. The research method used was a self written diagnostic questionnaire.

Results

82,5% of respondents acknowledged that there's a legitimacy of using restrictions of intake of high-phosphorus products.

Contrarily 32% of those questioned picked the correct set of meat with a low content of phosphates, 32% were aware of the necessity to restrict intake of egg yolk and 26% knew what kind of baked goods are recommended in a diet with restricted phosphorus.

Conclusion/Application to practice

Participants were aware of the necessity of applying a diet with restricted intake of high- phosphate products by patients on haemodialysis. Also, it showed acquaintance of how medicaments binding phosphorus in digestive system should be taken.

Knowledge regarding dietetic clues, which are supposed to restrict quota of assimilated phosphates, occurred to be insufficient and should be further expanded

Disclosure: No conflict of interest declared

O-P 51

Malnutrition prevalence in patients with advanced chronic kidney disease by bioimpedance and albumin levels

E. Melero-Rubio[1], R. Jurado-Pellicer[1], M. Parraga-Diaz[1]

[1]Servicio Nefrología, Hospital Clínico Universitario Virgen de la Arrixaca, Murcia, Spain

Background

The mortality in patients with renal chronic disease is hardly conditioned by the nutritional status. The prevalence of malnutrition is estimated in 50-70%, this is the first reason for determinating and monitoring of nutritional status which is necessary along the progression or starting levels.

Objectives

Identifying nutritional status in patients that participate at a renal nurse consultation by using serum albumin and bioimpedance.

Methods

Observational research, descriptive, transversal and prospective along year 2016. We included every patient who came at the renal nurse appointment in that period of time. We registered variables like demographics, serum albumin, creatinine clearance and bioimpedance. Program SPSS for Windows was used.

Results

We studied 53 patients, 25 men and 28 women, 43% which age was more than 65 years old, and 91% of them lived in a family environment. According to albumin, 94 % of these cases were in a normal nutrition status and just 6% had an undernourishment (all of them were men). The 26% presented lean mass values less than normality and 28% showed fat mass values out of normal range. Hydration status was normal in 41,5%, 2% were low and 56.5% above range. Overhidration in men represented 64%. Glomerular filtrate mean was 13.79. There wasn´t statistic signification between CKD-EPI and albumin.

Conclusion/Application to practice

With the regards of previous results in the study we could conclude that the malnutrition prevalence, depending on albumin level as standard parameter, in patients with advanced kidney disease was low, although when this prevalence was measured with bioimpedance the value was higher.

Disclosure: No conflict of interest declared

S 24 Plenary Session
Shared Care in CKD
Theatre Hall, 10:15-11:45

GUEST SPEAKER

ShareHD - giving patients the opportunity to be active in their own care

S. Ariss[1], T. Barnes[2], J. Fotheringham[2], P. Harriman[2], A. Henman[2], M. Wilkie[3]
[1]ScHARR, University of sheffield, Sheffield, United Kingdom; [2]Sheffield kidney institute, Sheffield teaching hospitals nhs foundation trust, sheffield, United Kingdom; [3]Kidney patient, sheffield teaching hospitals nhs foundation trust, sheffield, United Kingdom

Background

There is considerable evidence that greater patient engagement and helping people to manage their own health, is associated with better outcomes across a range of long-term conditions and is a key objective of the NHS Five Year Forward View plan. The practice of shared care and its benefits in dialysis patients however is not yet fully established.

Objectives

Together with our partners, including Kidney Research UK, a collaborative network of dialysis units at 12 NHS Trusts has been established in order to extend the learning from local initiatives and the *Yorkshire and Humber Shared Haemodialysis Care* programme, to build a body of evidence that can support a nationwide change towards better patient choice.

Methods

Central to the programme is a series of modified breakthrough collaborative learning events designed to equip teams of patients and staff from the sites, with a range of QI skills, to help them understand issues that need improvement and design and to deliver and measure multiple small tests of change to increase patient engagement in their dialysis care.
The evaluation includes a 2 year cohort research study (600 patients, 12 sites) exploring dialysis tasks and independent dialysis (at home or in-centre). Additional health economic aspects include patient activation, quality of life, and outcomes including hospitalisation. A qualitative component will identify what works, for whom, in what circumstances and why.
A **SHAREHD** Patient Advisory Group ensures greater patient representation both at programme and workstream level as well as providing Patient Champions at each site.

Disclosure: No conflict of interest declared

O 33

Decision support interventions for patients with advanced chronic kidney disease and their families

M. C. Loiselle[1], C. Michaud[1], A. O'Connor[2]

[1]School of Nursing, University of Sherbrooke, Longueuil, Canada; [2]School of Nursing, University of Ottawa, Ottawa, Canada

Background

Dialysis modality selection is complex and involves an informed decision. Decision support requires the nurse to develop decision coaching skills to promote better outcomes for patients and their families.

Objectives

To design, implement and evaluate a nursing decision support intervention to help patients with advanced chronic kidney disease and their families to choose a dialysis modality in *predialysis clinic***.**

Method and results

A qualitative participatory research design combined with the Ottawa Decision Support Framework was conducted in three phases. The design phase (1st phase) included a qualitative survey of 32 key informants (patients and professionals) to explore decisional needs, which revealed needs in a five-stage journey. Considering the highly emotional nature of those needs, other frameworks were added. Altogether, they provided the foundation for the development of the patient decision aid, decision coaching interventions and the nurse skill-building workshop. Following nurses' training, the implementation phase (2nd phase) was aimed at field-testing the intervention. Finally, the evaluation phase (3rd phase) describes the experiences of two nurses, who offered the decision-support intervention to six patients and their families who faced the decision regarding a type of dialysis. The results showed that the intervention was acceptable, useful, and applicable for use with these participants. Patients and families made informed value-based decisions, and nurses developed their skills in providing decision coaching with a patient decision aid.

Conclusion/Application to practice

This study shows how true partnership with patients/families and nurses caring for them is helpful to design useful interventions for shared care in chronic kidney disease.

Disclosure: No conflict of interest declared

O 34

Care coordination in CKD patients undergoing haemodialysis

A. Lino[1], H. Araujo[1], A. Bernardo[1], J. Fazendeiro Matos[2]

[1]NephroCare Covilhã, Fresenius Medical Care, Covilhã, Portugal; [2]NephroCare Portugal, Fresenius Medical Care, Porto, Portugal

Background

Care coordination involves the systematic organisation of patient care activities and communication of information to all professionals involved in the patient's care to improve safety and efficiency of patient care.

Objectives

To implement a care coordination model, assessing its impact on different fields of patient care.

Methods

Application of a care coordination model by a reference nurse over a period of two years. We defined four main priority areas including: education of the patient and family, vascular access, effectiveness of dialysis treatment, and hydration status.

Results

Evaluation of care coordination implementation revealed:

- Significant preoccupation of nurses regarding patient and family education required for a successful haemodialysis treatment;
- Increase of the secondary patency rate of AVF (2 years, 83%);
- Significant improvement of the substitution volume from 2014 to 2016 (22.7l to 23.5l);
- Increase of dialysis efficacy corresponding to the dialyser fibres coagulation status in both years;
- 83% of the patients reached the hydration status targets (vs 62% at the beginning, including targets for hydration status assessed by bio-impedance spectroscopy for pre-dialysis blood pressure and for anti-hypertensive medication).

Conclusion/Application to practice

Close patient monitoring was identified as an important component of the daily care of CKD patients on haemodialysis improving relevant patient outcomes. A routine assessment of the coordination needs and outcomes of CKD patients may offer an opportunity to proactively address special needs and solve potential problems avoiding major clinical events and hospitalisations.

Disclosure: No conflict of interest declared

O-P 52

Patient involvement, for whose sake?

N. Solskov[1], J. Finderup[1]

[1]Renal Medicine, Aarhus University Hospital, Aarhus N, Denmark

Background

Research shows that patients on haemodialysis often are able to manage more than they believe themselves and far more than the nurses allow them to. There is a considerable variation in the active participation of patients in their own haemodialysis treatment. A haemodialysis unit has worked systematically to involve patients in their own haemodialysis treatment.

Objectives

To involve patients actively in their own haemodialysis treatment respecting individual patient wishes and abilities.

Methods

A development project included 28 patients. Patients and staff developed practical tools in collaboration. Evaluation was made by interviews with eight patients and a quality audit of the patient records for all 28 patients.

Results

The interview results indicated that some patients only took part in their haemodialysis treatment to please the staff. The quality audit of the patient records showed that the nurses focused very much on technical skills and there was a lack of focus on the patients' experiences of involvement in their treatment.

Conclusion/Application to practice

There is a need for involving patients systematically in the decision on how they wish to participate in their own haemodialysis treatment and the nurse documentation should reflect these wishes. A new approach to patient-nurse interaction is needed. Nurses must see the patient as an active partner in their own treatment. The nurse's role is as a facilitator and educator rather than a caregiver. This has implications or workflow and implementation of new staff routines.

Disclosure: No conflict of interest declared

O-P 53

Delivering a large renal study across multiple satellite dialysis units

E. Mangahis[1], C. White[1], I. Macdougall[1]

[1]Renal Research Unit, King's College Hospital, London, United Kingdom

Background

High quality clinical research studies are necessary to improve healthcare in patients. In contrast to other medical specialties, the majority of dialysis patients in the UK are managed in satellite dialysis units, geographically distinct from the mother unit. At our renal unit in London, there are 6 satellite dialysis units located up to 16 miles from King's College Hospital. More than 80% of our haemodialysis patients are treated in one of these units. This potentially creates problems for clinical research in dialysis patients, since including them in a large clinical trial is essential for study delivery.

Methods

To facilitate recruitment and smooth running of the PIVOTAL study (2080 patients throughout the UK), several practices were adopted, as follows:-

- Delivery of study training to 6 renal satellite units
- Implementation of a telephone consenting process
- Identification of "link nurses" at the satellite units
- Regular communication with satellite unit managers and link nurses
- Regular visits to satellite units
- Support from Kidney Research UK (research nurse funding, posters and patient contact cards, Patient Support Group).

Results

Progress to date: Over the past 2 years, 136 patients have been screened and 118 patients have been randomised from our unit. 116 of the 136 patients were located in one of the 6 satellite units.

Conclusion/Application to practice

Delivering a large renal study across multiple satellite dialysis units is possible, but research staff need to be aware of the hurdles that require to be overcome. Strategies need to be implemented to overcome these hurdles in order for the study to be successful.

Disclosure: No conflict of interest declared

O-P 54

Interdisciplinary approach to hyperphosphataemia treatment adherence in haemodialysis patients

A. Saraiva[1], S. Ribeiro[1], A. Seabra[1], N. Gomes[1], C. Antunes[2], J. Fazendeiro Matos[3]

[1]NephroCare Coimbra, Fresenius Medical Care, Coimbra, Portugal; [2]NephroCare Portugal, Fresenius Medical Care, Lisboa, Portugal; [3]NephroCare Portugal, Fresenius Medical Care, Porto, Portugal

Background

Hyperphosphataemia in haemodialysis patients is often associated with non-adherence to treatment. Since this problem is related to food intake and medication, an interdisciplinary approach is essential.

Objectives

To assess the impact of an interdisciplinary training programme on the patients' phosphorus levels and treatment adherence.

Methods

Prospective, quantitative, descriptive and analytical study with the implementation of an interdisciplinary education three months programme (started Feb-2016).

Patients were divided into 3 groups: Groups-A (n=17) and B (n=17): patients with normal phosphorus values. Group-C (n=11): patients with phosphorus levels above the normal range.

This programme was applied to groups-B and C. Phosphorus levels were assessed on a monthly basis. The Measure Treatment Adherence Scale and a questionnaire of knowledge and attitudes about nutrition and food intake were applied. As patients of group-C still suffered from hyperphosphataemia, an advanced training programme with the person responsible for cooking the patient's meals was implemented.

Results

We observed a significant increase of phosphate binder adherence in group-B (p=0.003) and improvements in dietary habits with reduced intake of phosphorus-rich foods in groups-B and C. However, the programme was not effective in improving the patients' phosphorus levels.

Conclusion/Application to practice

An interdisciplinary approach can increase medication and dietary adherence. However, this does not necessarily lead to improved phosphorus levels. The lack of efficiency may partly be due to the small sample, short duration of the programme and the influence of the partners on patients eating habits and medication adherence. Further conclusions will be obtained as soon as the new interventions will be completed.

Disclosure: No conflict of interest declared

O-P 55

Changing nursing culture improves dialysis options and service delivery

L. Thompson[1], **C. Charlton**[1]

[1]Renal Medicine, City Hospitals Sunderland. Sunderland Royal Hospital, Sunderland, United Kingdom

Background

Patients desired more involvement in their dialysis care. Opinion was that assisting patients to be independent was unsafe. The home dialysis population was small, thus supporting rationale for change. This presentation observes challenges encountered in introducing new practice and changing culture.

Challenges

- Promotion
- Momentum
- Resources
- Changing attitudes and practice.
- Fostering trust
- Team support

Objectives

Positively change nursing attitudes to support patient's aspirations.

Methods

The team was briefed, and a select group of staff were educated and supported as designated trainers creating a sub team within existing staffing. Patients who expressed interest were offered the opportunity to learn self-care dialysis.

A robust dialysis training manual was designed for staff and patients to use collaboratively.

As service expanded, 2 self-care stations were opened.

Results

The cohort of independent patients increased from 0% to 28% of the satellite population, this led to the sub team of trainers being expanded to continue this trend. This successful change, led to a virtual satellite unit and home dialysis hubs creating valuable satellite dialysis spaces.

Nursing recruitment was enhanced and machines were sourced with flexible treatment options matching the huge demand with minimal installation costs.

The renal service joined a UK National project "Scaling Up" through ShareHD, an opportunity to learn by networking.

Finances were secured and home dialysis rapidly increased from a cohort of 2 to 20 in 3 months. Staff developed new skills, patients gained more treatment options to support a better quality of life.

Conclusion/Application to practice

Adapting methods of care to support patients aspirations increased choice improved the overall dialysis service.

Disclosure: No conflict of interest declared

S 25 Closing Ceremony
Theatre Hall, 12:00 - 13:00

GUEST SPEAKER

The future of anemia management in patients with chronic kidney disease

A. Więcek[1]
[1]Department of Nephrology, Transplantation and Internal Medicine, Medical University of Silesia, Katowice, Poland

The introduction of recombinant human erythropoietin (rHuEPO) into the clinical practice in 1989, has revolutionized the treatment of anaemia in patients with chronic kidney disease (CKD) and almost completely eradicated the need for blood transfusion in patients with end-stage kidney disease (ESKD). During the last 2 decades the structure of rHuEPO have been modified in order to increase the half-life and wider administration schedule. However there is also a rapid progress in the development of completely new Erythropoiesis Stimulating Agents (ESAs), which currently are under the different stages of experimental or clinical evaluations. The most promising groups of new ESAs are Hypoxia-Inducible Factor (HIF) stabilizers, primarily function by mimicking the hypoxia-driven expression of endogenous EPO in the kidney. Failure kidneys are still able to produce EPO, as shown in patients with CKD and in several experimental models. Additionally, HIF stabilizers stimulate in adults the production of EPO by the liver. A unique features of HIF stabilizers are a) that they are orally administered and b) they induce the increase serum EPO concentrations in the physiologic range, in contrast to the high peak concentrations observed with rHuEPO therapy, which potentially may be harmful. Several agents from this class of HIF stabilizers are currently under the intensive clinical evaluation. It will be important to proof not only their effectiveness in terms of increase of blood haemoglobin concentration but also the safety of these new compounds (possible widespread stimulation of different pathways may lead to the unexpected side effects). Another new concepts of the erythropoiesis stimulation in CKD patients include: EPO – mimetic peptides (EMPs) a group of synthetic cyclic peptides capable of stimulating the EPO receptor (amino acid sequence is completely different from the endogenous hormone), Epoetin fusion proteins, antibody agonists to EPO receptor or EPO gene therapy. The development of new strategies in the treatment of anaemia in CKD patients is still an evolving and fascinating area, which certainly will bring several new options in the near future.

WORKSHOPS

W 01A-H Workshop - NxStage Medical, Inc.
Home Haemodialysis - A Nurses Guide to Implementing Best Practice in Home
Conference Hall Complex A
Abstract is not available

W 02A-D Workshop – Medtronic

Novel technologies for AV fistula cannulation: A Hands on Workshop to improve hemodialysis outcomes

Conference Hall Complex G, Sunday, September 10, 2017

Conference Hall Complex G, Monday, September 11, 2017

Introduction

Cannulation is not just about inserting the needle into the vein; it is about doing so in the least harmful manner possible, while providing a good patient experience. Training, education and mentorship of nurses learning to cannulate is essential (Wilson et al, 2013; Parisotto and Pancirova, 2014).

Aim

The aim of the workshop is to share good practices and challenges dialysis nurses face for the AV fistula management, to share a testimony of a 30-years experienced nurse regarding plastic cannula and to provide training through a hands on session for AV fistula cannulation.

Design

There will be four sessions to be held on September 10th and September 11th organized as follows:

Title	Speaker
Introduction	MDT representative: Andrew Cox
Care and management of AV fistula; challenges and issues of nursing practice	EDTNA representative
A personal experience of 30 years with flexible cannula.	Julia McCarthy
Training on simulation models	All
Summary and takeaway messages	EDTNA and MDT representative

During the "Training on simulation models" session, there will be different stations were participants will be able to try in-vitro the cannulation procedure with fistula cannulas.

Conclusion

Through this workshop the participants will have the opportunity to increase his/her knowledge on AV fistula care and management, to learn through the testimony of a 30-years experienced nurse and to try the novel fistula cannula device.

W 03 Workshop - Innovative Health Technologies- Theoretical part
Theoretical study result - Catheter protection dressings. Improving patients' quality of life
Workshop - Ground Level, 9:00-10:30

Objective

The objective of this scientific record is to compare the current protection systems that are made by hand by healthcare personnel (traditional dressings) vs a self-adhesive dressing- pouch

To verify if the self-adhesive dressing-pouch scientifically improves substantially the quality of life of patients with hemodialysis central venous catheter.

Evaluation of patient / Nursing satisfaction

To compare the current protection systems that are made by hand by healthcare personnel (traditional dressings) vs a dressing- pouch

Following criteria were investigated:
Easy to apply
Time required for healthcare personnel to place and remove the dressings
Comfort/disconfort caused to patients when the dressings are removed
Tolerance of the patient's skin
Protection of the catheter
Visibility of incision point
Permeable to steam and impermeable to liquids and microorganisms
Fixation of the catheter
Risk of infection
Report of complications

Results of the records

W 04

Workshop - B. Braun

Exploring Nutrition Support Practices in Haemodialysis Units- From a theoretical perspective

Workshop - Ground Level, 12:45 - 13:45

Abstract is not available

W 05 Workshop

Advance Care Planning (ACP) with older patients who have end-stage kidney disease: practical and theoretical insights from a process evaluation

Conference Hall Complex B, 16:00-17:30

Advance Care Planning (ACP) with older patients who have end-stage kidney disease: practical and theoretical insights from a process evaluation

P. O'Halloran[1], J. Reid[1], W. Johnston[2]

[1]School of Nursing and Midwifery, Queen's University Belfast, Belfast, United Kingdom; [2]Patient Support and Advocacy Officer, Kidney Care UK (The British Kidney Patient Association), Alton, United Kingdom

Background

Chronic kidney disease (CKD) and kidney failure (end-stage kidney disease - ESKD) become more common as people age. They increase the risks of other major illnesses and sudden death. Even so, many people with ESKD do not discuss their preferences for end-of-life care with their families or healthcare professionals. Advance care planning (ACP) can help patients and families think through their preferences for future care and discuss these with the professionals looking after them. This may lead to care more in keeping with patients' wishes and so reduce distress for patients and families. Consequently, ACP is recommended as good practice for people with ESKD. However, ACP can be a complex and challenging process for patients, their families and professionals, raising cultural and personal sensitivities around death; with uptake influenced by a range of social and cultural beliefs, and organisational issues.

Objectives

To identify key characteristics of the intervention, the organisational setting, and the individuals involved, that help or hinder successful implementation of ACP.

Methods

Focus groups with staff; interviews with patients and relatives; process-mapping.

Disclosure: No conflict of interest declared

W 06 Workshop
Oral care on CKD patients
Conference Hall Complex B, 9:00-10:30

Oral and dental aspects of chronic kidney disease

N. Kumar[1], **T.M. Ho Wong**[2]
[1]Special Care Dentistry, Eastman Dental Hospital, London, United Kingdom; [2]Hospital Del Mar, Barcelona, Spain

Background

Chronic kidney disease and its management are associated with a wide spectrum of oral manifestations, affecting both the hard or soft tissues of the mouth. They can also impact on the planning of dental care.
All healthcare professionals need be aware of the baseline prevention strategies that should be in place to minimise oral disease and discomfort. Furthermore, awareness of the potential oral manifestations will allow for screening programmes to be implemented, enabling early detection and management. These measures can have a positive effect on the quality of life for patients with CKD.

Objectives

1. To describe the potential oral complaints for patients with CKD
2. To detail the potential jawbone changes
3. To detail the mucosal lesions that may be present
4. To describe how the growth and development of the jaw and teeth may be affected
5. To discuss the impact on dental decay and gum disease
6. To describe prevention / screening strategies
7. To discuss how the delivery of dental treatment may need to be modified

Conclusion/Application to practice

It is important to raise awareness amongst patients and healthcare staff regarding the impact of CKD on the mouth. This will result in early prevention strategies being implemented, timely management and ultimately an improvement in the quality of life for patients.

Disclosure: No conflict of interest declared

W 07 Workshop
Emotional Intelligence for Effective Teamwork
Conference Hall Complex B, 11:00-12:30

Emotional Intelligence for Effective Teamwork

J.M. Sedgewick[1]
[1]Department of Nursing Education & Development, King Faisal Specialist Hospital & Research Centre, Jeddah, Saudi Arabia

Background

Within the healthcare setting the important attributes for successful teamwork are often viewed as both visible and invisible. The clinical skills and technical artistry of members of the renal team can be assessed and this determines the visible skills within the team.
Emotional Intelligence (EQ) is viewed as another important skill for effective team work. Emotional Intelligence consists of the elements: self-awareness, self-regulation, empathy, motivation and social skills. These skills are not easy to test for as with visible skills but are seen as important for team harmony and success.
This highly interactive workshop will provide participants with the opportunity to:

1. Appreciate how Emotional Intelligence determines the necessary skills and competencies for effective performance
2. Understand research findings related to the importance of EQ to teamwork and particularly to leadership practice.
3. Develop an insight into individual EQ strengths and weaknesses.
4. Understand how EQ can shape workplace issues.

Participants will be working in small groups using a variety of creative learning approaches to encourage sharing of professional experience.

Disclosure: No conflict of interest declared

W 08 Workshop - B. Braun

Exploring Nutrition support Practices in haemodialysis units- From a practical perspective

Conference Hall Complex B, 12:45 - 13:45

Abstract is not available

W 09 Workshop - Innovative Health Technologies
Dialysis catheter care - Dressings for catheter protection
Conference Hall Complex B, 14:00-15:30

Objective

The objective of this scientific record is to compare the current protection systems that are made by hand by healthcare personnel (traditional dressings) vs a self-adhesive dressing- pouch

To verify if the self-adhesive dressing-pouch scientifically improves substantially the quality of life of patients with hemodialysis central venous catheter.

Evaluation of patient / Nursing satisfaction

To compare the current protection systems that are made by hand by healthcare personnel (traditional dressings) vs a dressing- pouch

Following criteria were investigated:
Easy to apply
Time required for healthcare personnel to place and remove the dressings
Comfort/disconfort caused to patients when the dressings are removed
Tolerance of the patient's skin
Protection of the catheter
Visibility of incision point
Permeable to steam and impermeable to liquids and microorganisms
Fixation of the catheter
Risk of infection
Report of complications

Results of the records

W 10 Workshop - Art of Communication
Fresenius Medical Care Supporter of EDTNA/ERCA
Workshop - Ground Level, 16:00-17:30

A guide for nurses in their day to day communication with patients

M. Kelly[1]
[1]Coordinator of Counselling Services, Irish Kidney Association, Dublin, Ireland

Background

We all know the value and importance of clear and regular communication in our work with patients. We can all recall times when our communication has led to misunderstanding rather than clarity. Also, there are times we can point to when our communication was crystal clear and had its desired effect. This demonstrates that communication is not as strightforward as we imagine. Our communication can be influenced by many factors, for example, language, culture, mood and body language.

Objectives

This interactive workshop will explore different types and styles of communication. We will consider some of the common mistakes we make in communication and then complete the workshop by focusing on particularly sensitive issues, for example, dying and death and non-adherence.

Methods

A PowerPoint presentation will frame the workshop. Participation in the workshop will be encouraged. Your own experience and questions will be a valuable resource in this workshop.

Disclosure: No conflict of interest declared

DIGITAL POSTERS

E-P 001

Follow-up of the fate of our pre-dialysis patients between 2009 and 2016

J. Toth[1, 2], I. Szakacs[1], E. Nagy[1], I. Kulcsar[1, 2]

[1]Dialysis Centre No. 6, B. Braun Avitum Hungary cPlc., Szombathely, Hungary; [2]Markusovszky University Teaching Hospital, Szombathely, Hungary

Background

The number of patients with advanced chronic kidney disease increases year by year.

Objectives

To follow up the fate of pre dialysis under our centre care

Methods

In the study, we included patients (n=881) who repeatedly had an eGFR value of 20 mL/minute/1.73m^2 or less while being in our care.

Results

The mean age of the follow-up patients was 69.6±13.7 years at the start of the care (70,5% were over 65 years of age), and the mean follow-up time was 3.7±3.2 years. The mean eGFR was 19.2±6.1 at the start and 19.4±11.1 mL/minute/1.73m^2 at the end of the follow-up period. At the end of 2016, 221 patients (25%) were still in our care. At the end of the follow-up period their mean age was 72.8±15.6 years and the mean eGFR had changed only slightly.

Because of markedly improving renal function, 66 patients (7.5%) were redirected to their family doctors. 134 patients (15%) disappeared. A total of 162 patients (18.4%) died – their mean age at the time of death was 77.8±10.5 years and their mean eGFR value was 19.2±7.9 mL/minute/1.73m^2. A total of 295 patients (33.8%) were drawn in a dialysis program: 105 patients chose peritoneal dialysis and 190 opted for haemodialysis.

Pre-emptive transplantation was performed in 3 patients.

Conclusion/Application to practice

25% of the patients have been in our care in stable condition for 4.4±3.9 years on average. 36% of patients entering a dialysis program chose peritoneal dialysis.

Disclosure: No conflict of interest declared

E-P 002

Examining stakeholders' perspectives on the implementation of an integrated kidney supportive care program

A. Bonner[1, 2, 3], L. Purtell[1, 3], H. Healy[2, 3, 4], I. Berquier[2], C. Douglas[5], B. Chaplin[1], W.E. Hoy[3, 6]

[1]School of Nursing, Queensland University of Technology, Brisbane, Australia; [2]Kidney Health Service, Metro North Hospital and Health Service, Brisbane, Australia; [3]NHMRC CKD Centre of Research Excellence, University of Queensland, Brisbane, Australia; [4]Kidney Research Laboratory, Queensland Institute of Medical Research, Brisbane, Australia; [5]Palliative and Supportive Care, Royal Brisbane and Women's Hospital, Brisbane, Australia; [6]Centre for Chronic Disease, University of Queensland, Brisbane, Australia

Background

Kidney supportive care (KSC) is emerging as a crucial component for individuals with kidney failure—either those pursuing a conservative pathway or those for whom dialysis is burdensome or likely to become unviable. Typically KSC services rely on traditional referral from the renal team to the palliative care team, thus maintaining specialist siloes of service.

Objectives

To identify factors enabling or impeding the implementation of a new integrated KSC program (KSCp) from a hospital staff (stakeholder) perspective.

Methods

Using a prospective, longitudinal mixed methods design informed by the Consolidated Framework for Implementation Research (CFIR), 18 stakeholders were interviewed about the implementation and operation of the KSCp. Stakeholders included clinical (medical, nursing and allied health) and senior hospital executive personnel. Transcripts were analysed deductively according to the five CFIR constructs (intervention characteristics, outer setting, inner setting, characteristics of individuals and process).

Results

Overall, stakeholders had a positive view of the role of the KSCp and its implementation. Key strengths identified included improved outcomes for patients and families, structured patient pathways for symptom management, dialysis withdrawal and end of life care, and high program acceptability. Uncertainty around ongoing funding of the program, logistical difficulties for some patients to attend the clinic and communication between clinical staff and executive decision-makers were identified as factors to be fine-tuned in the next stage of the program's operation.

Conclusion/Application to practice

In the current setting, the KSCp was highly acceptable throughout the organisation, and seamlessly integrated the renal and palliative care teams. This KSCp model may be transferable internationally.

Disclosure: No conflict of interest declared

E-P 003

OPTIONS for the older patient with advanced kidney disease

L. Brown[1, 2, 3], G. Gardner[2], A. Bonner[2, 3, 4]

[1]Renal Unit, Wide Bay Hospital and Health Service, Hervey Bay, Australia; [2]School of Nursing, Queensland University of Technology, Brisbane, Australia; [3]NHMRC CKD Centre of Research Excellence, University of Queensland, Brisbane, Bangladesh; [4]Kidney Health Service, Metro North Hospital and Health Services, Brisbane, Australia

Background

Health care decisions are regarded as complex when there is uncertainty about risks and benefits with no obvious single best choice. This is the case when older patients with advanced kidney disease are considering dialysis or non-dialysis management. Decision support interventions have been shown to assist individuals to make challenging decisions. The effectiveness of a decision support intervention (DSI) for advanced kidney disease has yet to be robustly researched to develop evidence to inform practice.

Objectives

To describe the development of a DSI (OPTIONS) designed specifically for the older person with advanced kidney disease.

Methods

The Ottawa Decision Support Framework was used to inform the development of OPTIONS. The development process involved; a) identifying the scope and purpose of the intervention, b) defining information content, c) synthesis of evidence regarding information needs, d) develop the evidence-based content including outcomes from a systematic review, e) assessment of readability with consideration of health literacy, and f) review by an expert independent panel. The final step was to test OPTIONS in a randomized control trial (RCT).

Conclusion/Application to practice

The RCT found that knowledge of the benefits and risks of dialysis were higher in the intervention group thus providing preliminary evidence that OPTIONS is applicable and feasible for this population group. By articulating the robustness required to develop a DSI, the renal multidisciplinary team can be reassured of the quality of OPTIONS.

Disclosure: No conflict of interest declared

E-P 004

The importance of rehabilitation in diabetic patients on dialysis

A. Mahrova[1, 2], M. Cerna[2, 3], E. Víšková[2]

[1]Sports Research Centre, Charles University, Faculty of Physical Education and Sports, Prague, Czech Republic; [2]Haemodialysis Centre, s.r.o., Dialcorp, Prague, Czech Republic; [3]Faculty of Philosophy - Applied Ethics; Faculty of Humanities, Charles University, Prague, Czech Republic

Background

Diabetes mellitus is one of major risk factors for the creation and development of chronic renal failure. Dialysis is necessary when kidney function deteriorates. The number of diabetic patients on dialysis is increasing. 45% of all patients on dialysis in the Czech Republic have diabetes. Dialysis patients show symptoms so called exercise intolerance - muscle weakness, muscle atrophy, feeling fatigue in a very short time and become more physically inactive.

Objectives

The aim of this paper is to give: 1) an overview of current knowledge in the field of rehabilitation of diabetics on dialysis; 2) knowledge of the exercise with diabetics on dialysis in dialysis Dialcorp centres, Ltd. - N = 65, F 26 / M 39; age 68.9 / 67.3 - (of PDL n = 134).

Results

Beneficial effect of regular physical rehabilitation and physical activity are recommended as an integral part of comprehensive care to improve overall functioning and quality of life of patients with diabetes on dialysis.

Conclusion/Application to practice

The main aspect of the rehabilitation in patients with diabetes on dialysis is to reduce the incidence of the syndrome of diabetic foot and other complications and to maintain or to improve physical and mental fitness and ensure that the patient's long-term self-sufficiency and self-care.

Disclosure: No conflict of interest declared

E-P 005

Diabetic foot - A surveillance and care programme

C. Santos-Cunha[1], S. Meneses[1], A.P. Martins[1], T. Magalhaes[1], C. Cunha[1], M. Cunha[1], M. Fonseca[1], J. Pinheiro[1, 2], J. Fazendeiro Matos[3], M.T. Parisotto[4]

[1]NephroCare Fafe, Fresenius Medical Care, Fafe, Portugal; [2]Health Science Institute, Portuguese Catholic University, Porto, Portugal; [3]NephroCare Portugal, Fresenius Medical Care, Porto, Portugal; [4]Care Value Management, Fresenius Medical Care, Bad Homburg, Germany

Background

Type 2 diabetes mellitus (DM2), is associated with many complications as a result of macroangiopathy and microangiopathy: diabetic foot, nephropathy and retinopathy that sometimes compromise productivity, quality of life and the survival of our patients.

Previous studies highlight the necessity to evaluate the feet of DM2 patients regularly and thoroughly by health care professionals, and to develop training measures to improve the patient's self-care.

Objectives

To describe the surveillance and systematic care programme of the diabetic foot.

Methods

Evaluation carried out by the physician and nurse responsible for diabetic patients of each shift by means of clinical evaluation supported by Doppler evaluation. Depending on the ulceration risk, every patient should be reassessed annually, every six months or every 1-3 months respectively, depending on the individual risk level, i.e. low risk, medium risk, or high risk.

Results

28 (35%) of our patients suffer from DM2. Sometimes the health care team was surprised by various advanced stage diabetic foot complications resulting in amputation. Therefore, the surveillance and the foot care programme proved to be essential.

Conclusion/Application to practice

Information about diabetic foot can be spread through various media: health care professionals, family and friends. Questions like "How do you wash your feet?" or "How do you avoid foot trauma?" are certainly the basis of good prevention work regarding the diabetic foot, as they allow the clarification of doubts, elimination of myths, provision of safety and familiarisation with terms and concepts through early awareness, which will make it easier for DM2 patients.

Disclosure: No conflict of interest declared

E-P 006

The impact of improving diabetic control on renal function in diabetic kidney disease patients

N. Khatib[1], K. Hasan[1], B. Ricon[1], A. Peldenger[1], S. Saliba[1]

[1]Preventive Nephrology Clinic, Clalit, Haifa, Israel

Background

Diabetes is the leading cause of end-stage renal disease in western countries. About 45% of chronic kidney disease (CKD) patients in Israel suffer from diabetic kidney disease (DKD).

Objectives

To evaluate the impact of improving diabetic control on the progression of DKD and daily proteinuria

Methods

150 DKD patients with HbA1c>9% followed up by an interventional team of the Outpatients Diabetes and Nephrology Clinic for 3 months. 29 patients who remained with HbA1c >9% were excluded. 121 patients (89 subjects with CKD grade 2-3 and 32 subjects with CKD grade 4-5) who decreased their HbA1c values <9% were included in the study. The follow up included: encouragement, training and adherence groups to careful glucose monitoring for 12 months.

Results

70% of patients reported frequent use of NSAIDs. Their mean eGFR was lower than those who did not consume NSAIDs (p=0.032). An inverse association was found between the reduction in HbA1c values and eGFR (p 0.004). CKD grade 2-3 who reduced their HbA1c increased their eGFR and improved their daily proteinuria (p0.004). CKD grade 4-5 patients, even decreased their HbA1c, they decreased their eGFR and increased the amount of daily proteinuria (p= 0.001). More hypoglycemic episodes and more cardiovascular events were observed in CKD grade 4-5 patients.

Conclusion/Application to practice

Early detection of DKD and strict interventional approach curried out by experienced team to obtain better diabetic control and adherence to preventive nephrological recommendations retard the progression of DKD, reduce hypoglycemic and cardiovascular events and may lead to better outcomes in this population.

Disclosure: No conflict of interest declared

E-P 007

The impact of diabetes on the frequency of vascular access complications in haemodialysis patients

E. Volodina[1], T. Glushenkova[2], M.T. Parisotto[3]

[1]Fresenius NephroCare Dialysis Centre, Fresenius Medical Care, Saratov, Russian Federation; [2]Fresenius NephroCare Dialysis Centre, Fresenius Medical Care, Ulyanovsk, Russian Federation; [3]Care Value Management, Fresenius Medical Care, Bad Homburg, Germany

Background

Diabetes is one of the main reasons for end-stage renal disease, i. e. a very serious disease which affects all body systems. Diabetic angiopathy causes difficulties for vascular access (VA) maturation. Stenosis and thrombosis are observed more frequently among dialysis patients.

Objectives

To determine the effect of diabetes on the occurrence of VA complications.

Methods

226 patients under treatment for more than 12 months were divided into 2 groups: group 1 with 192 non-diabetics and group 2 with 34 diabetics.

The groups were compared by age, treatment duration, blood flow, Kt /V, VA survival and number of VA complications over the past 12 months. In addition, patients were compared by body mass index (BMI) and smoking status.

Results

The results did not reveal any differences in both groups in terms of age, gender, and Kt /V.

In group1, the survival of the VA correlated with the treatment duration. This may indicate a long-term and adequate VA functioning.

Compared with group 1, group 2 experienced more VA cannulation problems (32.35 versus 5.2%) and a higher number of complications (29.4 versus 6.25%). As a result, there were more hospitalizations and repeated surgical interventions. Group 2 included patients with a higher BMI but fewer smokers than the group 1.

Conclusion/Application to practice

The study showed that diabetes seems to increase the risk of VA complications. Therefore, nurses should pay special attention to these patients, be aware of the first signs of complications and educate patients regularly. This can help to ensure a well-functioning VA.

Disclosure: No conflict of interest declared

E-P 008

The impact of nursing practice in reducing bloodstream infections in dialysis tunnelled catheters

E. Cassidy[1]

[1]Dialysis, B. Braun Wellstone, Galway, Ireland

Background

B. Braun Wellstone is a satellite dialysis clinic serving the West of Ireland for the last ten years. Although it is well documented that arteriovenous fistulas remain the 'gold standard' for haemodialysis the use of central venous catheters (CVC) remain high. There are many complications of CVC but infection rates remain a priority.
Over years many dialysis clinics have managed to reduce bloodstream infection (BSI) rate from 5.5 to 1.1 with strict controls. The unit adhered to strict policies and best practice guidelines.
All patients that attended the clinic with CVC were included within the study of bloodstream infection rates.

Objectives

To determine the impact of best practice guidelines and unit policies over ten years on bloodstream infection rates.

Methods

Data was collected quarterly over ten years included BSI rates, tunnelled catheters and catheter days while adhering to:
All patients with CVC received the same standards inline with unit policies with no deviations or staff interpretation.

- Two person connection
- Dialysis connection and disconnection packs used
- Dressing policy (chlorhexidine)
- Audits which included hand hygiene, and CVC
- Staff education and competency
- Patient education

Results

BSI over ten years Per 1,000 catheter days
2007 = 0
2008= 0.2
2009= 0
2010 = 0
2011=0.1
2012=0.07
2013=0.05
2014=0.06
2015=0.09
2016=0.06.

Conclusion/Application to practice

It is clearly evident that adhering to strict unit policies and guidelines significantly improve patient BSI rates. Many units have achieved BSI of 1.1 per 1000 catheter days. By introducing further quality measures such as a two person connection/disconnection will only improve infection rates and patient outcomes.

Disclosure: No conflict of interest declared

E-P 009

Waste management in a Haemodialysis Unit

H. Mezher[1]

[1]Haemodialysis Unit, American university of Beirut, Beirut, Lebanon

Background

Medical waste is defined as 'materials disposed of from hospitals or clinical settings' (clinics, dispensaries, dialysis units…). It includes sharps, non-sharps, chemicals, blood and body fluid materials (WHO, 2016). Medical waste is divided into non-hazardous and hazardous constituting 75%-95% and 10%-25% respectively.
Haemodialysis is aimed at maintaining homeostasis inside the human body by removing waste and excess water; we should be equally concerned about the external environment in which the dialysis is taking place by decreasing the waste generated. One haemodialysis session generates 2.5kg of solid clinical wastes, 38% as plastic, 0.075kg of paper. In total each patient produces around 390kg of wastes per year in which 101kg is PVC.

Objectives

With the increasing numbers of haemodialysis patients, the amount of waste generated will also grow, this in turn increase the burden on the environment, with the cost of managing waste an increasingly important issue, particularly with the cost of clinical waste disposition at the American University of Beirut which is currently 0.45$/kg. In addition to the solid waste generated from the dialysis procedure, there are also water losses during dialysis. The AUBMC haemodialysis center has initiated this project in 2015 as the first haemodialysis unit in Lebanon to start plastic recycling.

Methods

In order to fulfil our objectives, a TQM (Total quality management) approach was followed, and it was applied using FOCUS-PDCA methodology. The project was implemented based on a public health perspective and followed a performance improvement model. Outcomes were monitored and measured.

Results

Prior to the waste management project, the weight of the waste generated from the haemodialysis unit at the American University of Beirut during 2015 was a monthly average of 2350kg/960 session (2.44kg/session); after the implementation of the various steps mentioned above, we were able to make a drastic decrease to 2122.8 kg/1200 sessions (1.76 kg/session) in clinical waste making a decrease difference of 27.8 %. Also there was an increase in the weight of plastic wastes from zero as standalone waste to 1521kg/month.

Conclusion/Application to practice

Will this initiative be enough to make a change in the process of waste management?
It could be yes at the AUBMC level, but the answer is definitely no at the national level, where we need to initiate further studies at different hospitals, tabulate the outcomes and liaise with different stakeholders to formulate a unified policy in this regard

Disclosure: No conflict of interest declared

E-P 010

Basic life support training for carers of haemodialysis patients

C. Kurtz[1], E. Abu Khalil[1]

[1]Haemodialysis Unit, Medical Center of the Galilee, Nahariya, Israel

Background

Cardiac arrest accounts for approximately 60% of deaths in dialysis patients.
Provision of early basic life support (BLS) can triple survival. CPR between collapse and defibrillation significantly improves survival. BLS training increases probability that bystanders will perform CPR.

Objectives

Teaching BLS to the carers accompanying our dialysis patients, most of whom have not received prior training, or if trained are without skill review.

Methods

Structured interviews and observation of skills, before and after instruction. Skill reassessment after six months.
Interviews assessed demographic details, prior knowledge of BLS and interest in participating. Groups were organized according to dialysis schedules and BLS knowledge. Instruction took 30 minutes, taught BLS via explanation and demonstration on a manikin with feedback to assess understanding. Participants were asked what they felt and thought of the learning.

Results

33 participants in 10 groups, 2-7 people per group. 10 had previously learnt BLS. 27:6 M: F; 7 Druze, 15 Christians, 7 Muslims, 4 Jews.
After training all were competent to perform CPR, assessed by sequence of actions, depth and rate of compressions. All expressed willingness to initiate CPR. In February we plan to reassess skills, evaluate what information was retained and provide opportunity to practice with feedback. We have been asked by the participants to refresh the learning, and plan on offering teaching every six months.

Conclusion/Application to practice

BLS education increases confidence and willingness to start a resuscitation effort. Education empowers family members/caretakers and provides a feeling of confidence and lower anxiety.

Disclosure: No conflict of interest declared

E-P 011

Implementing a web-based competency modul in hemodialysis for newly hired nurses

M. Fettouhi[1], M. Landergren[1], B. Baek[1]

[1]Department of Nephrology Odense/Svendborg - Haemodialysis, Odense University Hospital, Odense, Denmark

Background

Clinical competence assessment with use of competency cards and using department guidelines has been implemented as a tool to improve the clinical training of newly hired nurses. Theoretical and practical teaching is supporting this process. The web-based module is a structured and systematic assessment tool used in the first 1½ years of employment

Objectives

To ensure newly hired nurses are trained in competencies to provide high quality care and treatment in a patient-centered and adult educational framework

Methods

A web-based competency module was used in the first 1½ years of employment of 7 nurses and contained 20 competency cards.
The teaching method was practical, working along side a mentor, with self-studying, tutoring, and reflection on practice.
Evaluations of the nurses was done by structured observation, summative and formative evaluation-processes and feedback meetings.

Results

Web-based access to the competency module was a positive experience.
The amount of competence cards were seen as appropriate.
The roles between the clinical educator and mentor needs to be more verbalized.
The mentor's ability to do clinical assessment and reflection must be strengthened.
Theoretical instruction must be organized without disrupting the learning process in practice.

Conclusion/Application to practice

Clinical competence assessment is a good tool to educate newly employed nurses.
Clinical guidelines and nursing instructions have come into play between the new employee and mentors as well as lifting the quality of patient care and patient safety.

Disclosure: No conflict of interest declared

E-P 012

Smile again to life

M. Zaher[1]

[1]Nephrology department, e.m.m.s Nazareth Hospital, Nazareth, Israel

Background

Psychosocial disorders are common amongst dialysis patients, affect quality of life and may cause depression. We present a case study of a patient usually optimistic with internal motivation who suddenly became nervous, aggressive, lonely and unmotivated.

Objectives

Empowerment self-confidence.

Methods

A 64 year old male receiving chronic haemodialysis due to diabetic nephropathy. Until recently, the patient was independent. Deterioration in his psychological situation was noted, as was evident by distress signals like pain without a specific complaint. A holistic approach was initiated.

Interview the patient; Using (cards) tool developed by Sanofi Company, Tal Center and Nephrologist Nurses Association, Israel. The tool consists of 9 cards displaying various subjects (dietary, drinking, diabetes, medications, healthy quality of life, sexuality, dialysis, and ”Joker“). The patient was asked to choose one card that attracted him, ideally to help him deal successfully with this subject; 3- 8 meetings between the nurse and patient, to monitor the application and impact of the plan.

Results

The patient chose the “Joker" card which lead to him being able to talk about difficulties of marital life including the changing family role that aggravated his psychological situation.

The patient showed progressive improvements in making behaviour changes including seeing the healthy aspect inside himself and exhibited relaxation signals, control and optimism.

Conclusion/Application to practice

The tool of patient empowerment has taught both, the nursing staff but mainly the patient, how to discover the healthy site inside himself. It gave him the ability to cope, make changes and to succeed by adopting a healthier life style

Disclosure: No conflict of interest declared

E-P 013

Investigating the level of nurses understanding of vascular access

N. Mehmedovic[1], M.T. Parisotto[2]

[1]Fresenius Medical Care BiH, Tuzla, Bosnia-Herzegovina; [2]Fresenius Medical Care, Care Value Management, Bad Homburg, Germany

Background

Nursing education and guidelines related to haemodialysis vascular access (VA) cannulation are essential for access survival, patient mortality and morbidity. The use of educational tools can raise knowledge and awareness for access management and define the best possible VA cannulation techniques and care.

Objectives

To assess current knowledge of VA and available educational/training programmes for dialysis nurses in Bosnia and Herzegovina (BiH).

Methods

We distributed a questionnaire about clinical organisation with 13 questions related to educational programmes and basic knowledge about arteriovenous fistula (AVF) and VA to all dialysis clinics in BiH.

Results

The most important finding was that educational programmes mainly exist in clinics owned by private public partnerships. Most questions related to basic knowledge about VA were correctly answered in all clinics. Questions related to AVF development, cannulation practice and care were answered correctly by nurses in clinics with existing educational programmes, although a few questions were answered incorrectly by almost all dialysis nurses.

Conclusion/Application to practice

Education programmes for dialysis nurses on vascular access, especially on AVF cannulation and care, should be implemented in dialysis clinics and supported with relevant policies and guidelines translated into the local language to provide appropriate information and guidance for regular education in daily practice.

Disclosure: No conflict of interest declared

E-P 014

Educating the patient about arteriovenous fistulae

N. Mehmedović[1]

[1]Fresenius Medical Care BiH, Sarajevo, Bosnia-Herzegovina

Background

Nursing care also comprises patient education. For dialysis patients, one of the most important topics is vascular access (VA). An improvement in patient outcomes can be expected if they understand the basics of arteriovenous fistulae (AVF), including self-assessment. The rope-ladder cannulation technique (RLC) can minimise the complication rate and thus prolong AVF function. However, patients often refuse this technique, because it is more painful compared to the area technique.

Objectives

To implement a systematic patient education programme on AVF.

Methods

In order to implement a pilot education programme, different materials related to AVF were prepared: education methods, questionnaire to assess the patients' basic knowledge of AVF focusing on 10 specific topics, instructions on how to document education, and a final questionnaire (to evaluate education effectiveness and patient satisfaction, to assess the acceptance of RLC).
The measurable outcome will be the evaluated on the basis of the results of both questionnaires.

Results

30 nurses in 10 clinics participated in the pilot implementation with 38 patients. Education was performed during dialysis sessions when appropriate. Acceptance of RLC and questionnaires will be evaluated and detailed results presented.
Following the pilot programme, all nurses will implemented structured education programme on AVF for all patients.

Conclusion/Application to practice

Dialysis patients should have a basic knowledge of their disease and the treatment and should actively participate in therapy procedures. They are more willing to accept advice, if they have proper information about the possible complications and benefits regarding a specific procedure. Self-assessment of AVF will enable early detection of complications which can influence outcome.

Disclosure: No conflict of interest declared

E-P 015

Effect of planned education on diabetic foot care behaviors in diabetics haemodialysis

Ş. Özdemir[1] A. Akyol[1]

[1]Nursing, Izmir, Turkey

Background

The number of cases with diabetic foot are becoming more frequent in diabetic individuals, which is a chronic complication. And it is worth noting that the individual attempts to protect diabetic foot, which threatens many attentions.

Objectives

To examine the effects of planned education on the development of foot care behaviors and control in DM individuals with dialysis treatment by using a descriptive and pre-post test study.

Methods

The study was carried out between January and February 2017. The number of patients in the study was sixty divided in three groups per twenty. The data were collected by the socia demographics Nothingam functional foot care diagnosis form (15 questions) and diabetic foot evaluation form.

Results

54.1 % of the patients included in the study were between 65-74, 16.4% were between 55-64, and the main age was 66.72 ± 10.048 and average year of dialysis treatment was 4.87 ± 3.65, retrospectively.When NAFF pre-education and post-training average scores were compared, it was found statistically significant difference between the main scores of method A, B and C. It has been determined that the training planned for the prevention of the development of DM individuals receiving dialysis treatment is a positive contribution to the outcome of all practices (A, B and C) and the positive effect of foot care behaviors and checks.

Conclusion/Application to practice

The first one month results of the planned training in the foot care behaviors of patients with diabetes receiving haemodialysis are positive. Three and six month's follow-up of the work will be continued.

Disclosure: No conflict of interest declared

E-P 016

Slovenian national preventive program "Children, take care of your kidneys"

A. Biteznik[1]

[1]Dialysis, SB Dr. Franc Derganc Nova Gorica, Nova Gorica, Slovenia

Background

The preventive program is carried out for the ninth year in collaboration with the Association of Kidney Patients and is implemented by kindergartens, elementary schools and health centers.

Objectives

The aim of the program is to raise awareness among children and their parents about what kidneys are, what their function is and how to maintain them healthy.

Methods

The educational part among preschool children is carried out with lecture for children in kindergartens.
The educational part in the 4th grade consist of a 15-minutes lecture and a half-hour cartoon from the cartoon series *Used to be life*.
In the 8th grade the lecture lasts two school hours or can be carried out as a one school hour workshop. Both are presented in a power point presentation with additional topics: chronic kidney diseases and treatments for kidney failure. After that a discussion follows between the children and the patients with chronic kidney failure.
We give each of them a bottle with water, brochures, abstracts and coloring books.

Results

In eight years we have visited 163 schools and carried out presentations to 7194 children. Schools and children are very interested in our lectures.

Conclusion/Application to practice

In the year 2016 we expanded the lectures in the entire country as part of the framework of the World Kidney Day in collaboration with the Kidney Patients Association of Slovenia, Slovenian Society of Nephrology and Slovenian Association of Nurses and medical technicians of nephrology, dialysis and transplantation. Altogether, we visited 49 schools and carried out 68 lectures.

Disclosure: No conflict of interest declared

E-P 017

The outcome of a patient training programme on patients' vascular access self-care behaviour

M. Cunha[1], C. Santos-Cunha[1], A.P. Martins[1], T. Magalhaes[1], C. Cunha[1], M. Fonseca[1], J. Pinheiro[1, 2], J. Fazendeir Matos[3], M.T. Parisotto[4]

[1]NephroCare Fafe, Fresenius Medical Care, Fafe, Portugal; [2]Health Science Institute, Portuguese Catholic University, Porto, Portugal; [3]NephroCare Portugal, Fresenius Medical Care, Porto, Portugal; [4]Care Value Management, Fresenius Medical Care, Bad Homburg, Germany

Background

The person participating in a regular dialysis programme may contribute to the surveillance of his/her arteriovenous access by means of monitoring during the intradialytic period.
Nurses play a key role for people with arteriovenous fistula (AVF) adopting self-care behaviours related to their AVF, in order to prevent complications or detecting them early, respectively.

Objectives

To understand the impact of a patient education programme (PEP) in the self-care behaviours of patients regarding their AVF.

Methods

We conducted a quantitative and descriptive study with 63 patients over 18 years with AVF and a Karnofsky index >70, who participated in the PEP for more than 6 months and provided their informed consent. We applied a Self-Care Behaviour Rating Scale with AVF in Haemodialysis (ASBHD-AVF) before and after a theoretical training. Each item was rated on a 5-point Likert scale with a higher score representing a better self-care.

Results

The mean score of ASBHD-AVF obtained with the first data collection group was 73 (88%) versus 71 (86%) in the second one.
A comparison of the 16 items between the two time points of data collection showed some improvements after the theoretical training, particularly in items: 1, 2, 6, 13, and 15 as well as some decline of items 4, 7, 8, 9, 10, and 16.

Conclusion/Application to practice

For the studied population, theoretical training per se is obviously not enough to change their self-care behaviour regarding their AVF.

Disclosure: No conflict of interest declared

E-P 018

Ethical aspects of termination or initiation of dialysis therapy

H. Jeřábková[1]

[1]Dialysis unit, B. Braun Avitum s.r.o., Litoměřice, Czech Republic

Background

Renal replacement therapy is a method of treatment that raises number of ethical issues. In the Dialysis Centre, we are sometimes confronted with the issue of termination or initiation of the dialysis therapy. In our settings, termination of dialysis therapy is exceptional.

Nowadays, the dialysis therapy is available to all patients who are indicated and give consent to the proposed treatment. Therapy cannot be terminated in the so-called uncooperative, socially maladjusted or aggressive patients. Limiting factors do not include age, assessment of quality of life and life expectancy.

Objectives

During dialysis therapy, some patients develop a whole range of complications - intractable conditions that in the patient, family or caregivers, raise questions about whether to continue with the dialysis? Decision making is always very difficult.

Conclusion/Application to practice

Discontinuation (or not even initiating) of the dialysis treatment and initiation of palliative care should be a joint decision of the medical team, the patient and his family. Palliative care is active and comprehensive treatment.

Dialysis is expensive and often it is associated with a burden to the patient. Futile therapy is a treatment that brings more sufferings than benefits to the patient.

The question of discontinuation or non-inclusion is not easy and often it is a subject of many discussions reflecting medical, psychosocial, ethical, legal and economic factors.

Disclosure: No conflict of interest declared

E-P 019

Ethical issues on dialysis in Slovakia (past and present)

S. Iterská[1]

[1]Dialysis unit, B. Braun Avitum s.r.o., Bratislava, Slovakia

Background

Until 1990, Slovak Republic had very few dialysis centres and were consequently unable to provide treatment for all patients requiring dialysis. Due to treatment inaccessibility, the decision on who will live and who will be denied this privilege were made based on specific criteria. The primary reason for a patients' selection was based on the criteria of so-called merciful mathematics and had an economic rather than ethical consideration. It was a problem involving the entire society, who participated in the so-called social euthanasia. Currently, this problem is satisfactorily addressed, therefore healthcare professionals do not face decision making problems concerning lives of others due to treatment unavailability.

During the dialysis treatment, we often experience issues that are in breach of ethics. At any time, addressing ethical issues is very difficult and challenging.

Objectives

The aim is to highlight changes in ethics in the Slovak Republic in the period of time until 1990 and from 1990 to the present.

Results

Currently, the most commonly occurring problem is the contradiction between the principle of assistance and no harm principle. Transplantation surgery poses a considerable ethical problem; and current dilemmatic question lies in adequate and accurate communication of information as well as addressing the ethical - legal problems.

Disclosure: No conflict of interest declared

E-P 020

The perceptions of religion in relation to nursing practice

E. Prevyzi[1]

[1]Nephrological Clinic, Tzaneio General Hospital, Athens, Greece

Background

Nursing practice is focussed increasingly on perceptions of religion. Theoretical and empirical literature addresses being religious as it relates to nursing practice, yet there is little consensus about what being religious in nursing care entails.

Objectives

The aim of this study is to to enhance the perceptions of religion in relation to nursing practice.

Methods

The literature review was based on the search of published research, systematic reviews in international (Pubmed, Cinahl,) and Greek foundations (Iatronet) electronic data, which referred to the perceptions of religion in relation to nursing practice during the period 2012-2016. 15 articles fulfilled the aim of the literature review.

Results

The review indicates that the perceptions of religion relate to nursing care in three aeras: the religious approach, the scientific approach, and the existential approach.

Conclusion/Application to practice

The perceptions of religiousness enhanced nursing practice as an altruistic, interpersonal and integrative expression that reflects the patient's reality, who asks for support in difficult circumstances.

Disclosure: No conflict of interest declared

E-P 021

Personal relationship between patient and dialysis nurse

M. Por[1], T. Szabo[1]

[1]Dialysis Center #14, B. Braun Avitum Dialysis Network, Kistarcsa, Hungary

Background

Most of the patients developing end stage kidney disease (ESRD) are come to the dialysis unit with fear of the dialysis treatment itself and they are afreid of deterioration of their overall condition. They have to face the burden of the chronic disease, comply with a number of restrictions to minimize long-term complications.
The patient on dialysis meet for 3 times a week the nurses. On one hand they are dependant on their treatment, but on the other hand they have benefit from their knowledge and education provided by them.

Objectives

How close and personal this relation should be?

Methods

Some nurses try to stay reserved in order to keep the professional distance. Patients are usually respect these nurses, but they tend to lock themselves up, not give more information thann actually needed by the nurse. This may delay the diagnosis of concomittant diseases or complications.
Some others build more close relation with their patient. This way patients tend to open up, they let the nurse get more involved in their problems and they dare to ask their questions to have a better understanding of their disease. They tend to better accept changes in the treatment presciption or in mediction. On the other hand too close relation may result in not taking the nurse serious enough and trying to bargain over decisions.

Conclusion/Application to practice

We have found that patient-nurse relationship has to be re-evaluated on regular basis in order to maintain a healthy tone in the dialysis unit.

Disclosure: No conflict of interest declared

E-P 022

Learning self-care haemodialysis through an interpreter

H. Harrung[1], S. Lagesson[1]

[1]Kungsholmsdialysen, Njurmedicin, Karolinska University Hospital, Stockholm, Sweden

Background

At Karolinska University Hospital, training patients for haemodialysis has been considered resource- and time-consuming. But in one unit, Kungsholmsdialysen, twelve patients have been educated to perform their haemodialysis treatment unaided.

Objectives

To give the patients who do not understand or speak Swedish the possibility to learn to perform their haemodialysis treatment unaided, within the same timeframe as Swedish speaking patients.

Methods

The training was performed four times a week during treatments, with use of an interpreter. Continuity in the team around the patient, especially the primary nurse but also the assistant nurse, physician, counsellor, interpreter and dietician was important.

The primary nurse was the educator and provided the educational material to the interpreter for translation. The patients were taught certain key words in Swedish which commonly appear on the screen of a dialysis machine. Patients were also able to receive help from other patients and pictures and encouraged to take notes. To be considered for home haemodialysis the patient must speak Swedish.

Results

All patients successfully managed to handle their treatments unaided. Two patients are now undertaking their haemodialysis at home, another moved to another unit with the purpose of continuing his haemodialysis unaided. The remaining patients stayed at Kungsholmsdialysen. We were successful in educating the non-Swedish speaking patients about their condition and its required treatment in the same timeframe as Swedish speaking patients and thereby increased their quality of life.

Conclusion/Application to practice

Through education patients gained increased self-confidence and were able to effortless integrate with our unit.

Disclosure: No conflict of interest declared

E-P 023

Case study: Calciphylaxis above haemodialysis patient-prevention or mortality

E. Ben Shahar[1], V. Shani[1]

[1]Nephrology and hypertension, Sheba medical center, Tel Hashomer, Ramat Gan, Israel

Background

Calciphylaxis is uncommon and severe disease which mainly appears in patients with chronic renal insufficiency. It is a small vessel vasculopathy characterized by soft tissue ischemia and necrosis owing to calcium deposition in the medial layer of subcutaneous arterioles and associated with high mortality (45-80%). Risk factors include female sex, white race, obesity, diabetes, elevated calcium-phosphate product, decreased albumin level, warfarin use, vitamin D administration, decreased albumin level, etc. Patients experience marked pain, recurrent infections and the constant risk of secondary sepsis.

Objectives

In our case, a 66-year-old woman presented with a 2-month history of painful and necrotic ulcers in her left shin. Cutaneous biopsy shows extensive calcification of the tunica media of small-mediumsized dermal and subcutaneous arterioles. Her medical history included diabetes mellitus type II, hypertension, obesity, haemodialysis, atrial fibrillation, decreased albumin, elevated phosphorus level, hyperparathyroidism and chronic heart failure.

Methods

Our management of calciphylaxis involved supportive management such as: wound care, pain control, discontinuation of warfarin, commencement of low molecular weight heparin, promotion normalization of calcium- phosphorus and parathyroid hormone metabolism**.** Simultaneously, intravenous sodium thiosulfate at standard dose, pain improved within several weeks and the ulcers healed within nine months

Results

We achieved good results with improvement of pain and slow healing of ulcerations over a short period, as described in the literature**.**

Conclusion/Application to practice

Despite advancements in the treatment of calciphylaxis, the disease is still associated with a high mortality rate. The aim of this case study is to help nephrology nurses identify risk factors of calciphylaxis and by that reduce patient mortality.

Disclosure: No conflict of interest declared

E-P 024

Health beliefs related to salt-restricted diet in patients with end-stage renal disease

M. Mollaoğlu[1], B. Yürügen[2]

[1]Cumhuriyet University, Sivas, Turkey; [2]Okan University, İstanbul, Turkey

Background

Determination of health beliefs related to adherence to diet is useful in terms of constructing tailored interventions towards the patients to change their beliefs and ensure adherence.

Objectives

The aim of this study is to examine the health beliefs related to salt-restricted diet and some related factors in patients with end-stage renal disease (ESRD).

Methods

215 patients who were followed in two HD centers in Sivas were enrolled in this study. A descriptive design was employed. The data were collected by Patient Information Form and Health Beliefs Related To Salt-Restricted Diet Form.

Results

The mean age of the study group was 51.3 years (*SD* = 14.8) and the average duration of hemodialysis of the respondents was 56 (SD=38) months. The majority of the participants were male (58.1%), were married (85.6%), had completed primary education (51.2%), and were unemployed (67.4%). The mean perceived benefits score of the patients was 25.4 (SD = 4.2). The mean perceived barriers score was 16.8 (*SD* = 3.8). The most frequently identified benefit was “Eating a low-salt diet keeps me healthy”, and the majority of the participants identified barrier was the “poor taste of food on a low-salt diet”. Perceived benefits score of married patients was higher than single. Also, the perceived benefits score of the patients with high education level was found to be high and the perceived barriers score was low.

Conclusion/Application to practice

These findings provide important findings to nurses about the care of hemodialysis patients. Knowing the health beliefs and the affecting factors will increase the patient's adherence.

Disclosure: No conflict of interest declared

E-P 025

Methicillin Resistant Staphylococcus Aureus (MRSA) Screening in a Cohort of 233

B. Halutzi[1], R. Fedorowsky[2], E. Atsy[1], A. Korzetz[1], M. Khasakiya[3]

[1]Hemodialysis, Rabin Medical Center Hasharon Hospital, Petach-Tikva, Israel; [2]Infection Control Unit, Rabin Medical Center Hasharon Hospital, Petach-Tikva, Israel; [3]Head Nurse Hemodialysis, Rabin Medical Center Hasharon Hospital, Petach-Tikva, Israel

Background

MRSA blood stream infection (BSI) is highly pathogenic among hemodialysis (HD) patients. Nasal carriers of MRSA have a high incidence of hospitalization and a subsequent high mortality rate due to MRSA BSI especially in those patients with a central vein catheter (CVC).

Methods

Out of 233 HD patients screened for nasal MRSA carriage between 2012-2015, 26% (60/233) were HD patients with CVC. Nasal bacterial cultures were taken once a year in all patients and twice a year in those patients with a CVC. Patients with a single positive MRSA culture were placed in strict contact isolation and were given nasal Mupirocin ointment twice a day for 5 days. Two weeks after completing the therapy, nasal cultures were taken. Patient remained MRSA positive, was given whole body chlorhexidine 2% washing and Mupirocin nasal ointment for another 5 days. The incidence of BSI rates was monitored from 1 Jan 2009 to 1 Jan 2016.

Results

Overall MRSA nasal carriers patients was 16% (37/233), MRSA nasal carriers patients with CVC was 30% (19/60), MRSA nasal carriers without CVC was 10.4% (18/173), Successful MRSA decolonization was 73% (27/37) of HD patients. Most of thePersistent nasal MRSA carriers were patients with CVC (6/10). MRSA BSI incidence decreased from 3 episodes before intervention (2009-2011) to 0-1 episode a year in 2012-2015.

Conclusion/Application to practice

MRSA nasal carriage in HD patients with CVC is very high. Successful decolonization (>70%) with local therapy decreased MRSA BSI incidence.

Disclosure: No conflict of interest declared

E-P 026

Vancomycin-resistant Enterococcus outbreak on nephrology department: how to manage it at the dialysis unit

C. Olbrechts[1], S. Crols[1], N. Van Paesschen[1], M. Roden[1], C. Tielemans[1], Doctors and nursing Staff Haemodialysis unit UZ Brussel[1], Infection Prevention Team UZ Brussel[1]

[1]Haemodialysis department, UZ Brussel Hospital, Brussel, Belgium

Background

Vancomycin-resistant Enterococcus (VRE) constitutes a risk for developing nosocomial infections. If within one month after detecting the first VRE-colonization or -infection, at least one new VRE-patient is discovered; an outbreak occurs. Before 2014, only few VRE-cases were reported in Belgium. Since then, an increasing amount of uncontrolled epidemics occurred.

THE OUTBREAK: In May and June 2016, the number of VRE-patients at the nephrology ward increased to six: 2 patients tested positive on routine rectal VRE-screening and 4 had a VRE-infection. Despite all efforts, 10 more patients screened positive on rectal swabs during July. Ten of the VRE-patients were in need of hemodialysis and often passed by the dialysis unit. Therefore, additional actions have been taken on the dialysis ward.

Methods

INTERVENTIONS: A multidisciplinary outbreak-team was compiled. All hemodialysis patients were screened for VRE with a rectal swab. Transmission of VRE was limited by an action-plan: VRE-patients were isolated in cohort in a separated dialysis room. Nurses were cohorted as well and single (patient) use materials were used where possible. All patients and drivers were educated in proper hand hygiene. Extra attention was paid on communication when internal and transmural transferring a patient with VRE. The quality of housekeeping was checked using UV-light testing.

Results

During the following 6 months six more patients in need of dialysis screened positive for VRE. Currently there are 11 long-term VRE-patients on the dialysis unit.

Conclusion/Application to practice

The outbreak and its introduced actions had a large impact on all patients and health care workers. Continuous vigilance is required.

Disclosure: No conflict of interest declared

E-P 027

The effect of neuromuscular electrostimulation in radiocephalic fistula maturation process

S. Rubio[1], P. Estruga[1], L. Martínez[1], V. Esteve[1], Y. Fernández[1], M. Ramirez de Arellano[1]

[1]Nephrology and vascular department, Hospital de Terrassa, Terrassa (Barcelona), Spain

Background

Radio- Cephalic fistula (RCAVF) is the gold standard vascular access for end-stage chronic kidney disease patients. Clinical data regarding the role of neuromuscular electrostimulation (NMES) in AVF maturation have been reported.

Objectives

To analyse the effect of a postoperative NMES programme on RCAVF maturation.

Methods

An 8 weeks single-center prospective study in RCAVF previously matured with a NMES programme. Hand-Grip (HG) measurement, Doppler Ultra Spund (DUS) parameters, clinical and DUS maturation postoperatively werw assessed.

Results

11 patients. 82% men. Mean age 65.4 ± 19.2 years. 82% RCAVF left sided. Mean Charlson index: 8.7 ± 3.9. 36% DM. HG (25.2 ± 10.5 vs 25.6 ± 11.5 kg, p 0.644)) and DUS statistically increases in RCAVF forearm vein diameter (2.9 ±0.8 vs 6.3 ± 1.5mm), radial artery diameter (2.6 ±0.4 vs 3.2 ± 0.6 mm) and humeral artery blood flow rate (117.90±33.1 vs 970.2 ±578.1 ml/min) at the end of study. Mean time first needle puncture: 63.8 ± 32.7 days. Clinical and DUS maturation were 100% and 82 % respectively. Main RCAVF complications: haematoma (27.3%), needle puncture cannulation disorders (36.4%), proximal reanastomosis (18.2%). However, no adverse effects of NMES were registered.

Conclusion/Application to practice

NMES programme of forearm muscles is a safe, effective technique to improve RACVF maturation process in our patients. NMES constitudes a novel alterative to forearm isometrics execises in RCAVF maturation. Nevertheless, further studies are required to confirm the potential effect of NMES in the vascular access maturation process.

Disclosure: No conflict of interest declared

E-P 028

The nurse's role in assessing the patient's hydration status through bioimpedance analysis

J. Atouguia[1], C. Caires[2], F. Ladeira[1, 2], M. Sousa[2], S. Abreu[2], V. Martins[2], E. Domingos[1, 2], B. Pinto[3], R. Peralta[3], J. Fazendeiro Matos[3]

[1]NephroCare Machico, Fresenius Medical Care, Machico, Portugal; [2]NephroCare Funchal, Fresenius Medical Care, Funchal, Portugal; [3]NephroCare Portugal, Fresenius Medical Care, Porto, Portugal

Background

Multifrequency bioimpedance (MFB) is used for the assessment of the hydration and nutritional status of patients as well as for the determination of the urea distribution volume. The nursing staff plays a key role in the identification of changes in the body composition during MFB.

Objectives

To evaluate the impact of regular MFB analysis and patient education on managing patient's dry weight.

Methods

From September 2014 to September 2015, BIS was carried out in 24 patients on a monthly basis. When overhydration was detected, BIS was performed every 2 weeks. To decrease the number of overhydrated patients, patients were trained about nutrition and hydration intake. Dry weight was routinely adjusted according to the results. The cut-off threshold for overhydration was set to >15% difference between the normal expected extracellular water (ECW) and the measured ECW.

Results

The patients had an average age of 59.17 years, 54% were male and the average treatment time was 248.54 minutes.

At the beginning of the study, 66% of the patients were within the normohydration range. This number increased to 75% during the follow up period. The remaining 25% of the patients were very close to normohydration.

The mean difference between the prescribed dry weight and the normohydrated weight shown by biompedance analysis was initially 0.38kg and finally 0.14kg, respectively.

Conclusion/Application to practice

Application of this procedure and patient's education seem to contribute to the improvement of the patient's hydration status and probably also leads to a better quality of life.

Disclosure: No conflict of interest declared

E-P 029

Self-care index of patients on haemodialysis

M. Liber[1], M.T. Parisotto[2]

[1]Dialysis Centre Poznan, Fresenius Medical Care, Poznan, Poland; [2]Care Value Management, Fresenius Medical Care, Bad Homburg, Germany

Background

Patients' self-care condition is one of the key criteria used to evaluate the level of needed nursing care, thus is can be used to determine the number of staff members and employment structure.

Objectives

Evaluation of self-care condition of haemodialysis patients.

Methods

Patients´ self-care was evaluated using the modified Barthel Index. Depending on the score achieved, patients were assigned to one of the following three categories:

Category 1, score 85-100: fully independent patient requiring minor assistance of nursing personnel in daily activities.

Category 2, score 21-84: patients requiring moderate assistance.

Category 3, score 0-20: incapacitated patients or patients requiring major assistance.

Analysis was based on reports from 71 clinics from 2013-2015 (59,000 measurements).

Results

Min – max range (measured quarterly from 2013-2015)

2.4 – 3.5% of all patients required major assistance of nursing personnel. The proportion of patients classified in category 3 in different clinics was 0-18.2%.

17.8 – 20.1% of all patients required moderate assistance of nursing personnel. The proportion of patients classified in category 2 in different clinics was 2.4- 45.8%.

77.2 – 79.8% of all patients were independent or only required minor assistance of nursing personnel. The proportion of patients classified in category 1 in different clinics was 36.7-95.1%

Conclusion/Application to practice

1. In the observational period, the average proportion of patients classified in each category remained at similar levels.
2. The number of patients classified in one of the three categories was very different among clinics.
3. There is a need of additional evaluation to fully evaluate the nursing care required by the different groups of patients.

Disclosure: No conflict of interest declared

E-P 030

Adapting the dialysis solution to the patient's needs

A. Puscas[1]

[1]Fresenius, Bucuresti, Romania

Background

In our unit, the dialysis solution plays a major role in the dialysis session. In order to put the patients' needs first, every patient was assessed by the physician and a personalized dialysis solution prescription issued depending on the diagnosis.

Objectives

To decrease the number of incidents during the dialysis sessions.

Methods

Apart from the standard solution K2*, Mg1*, Ca1.5* and Gl.0*, we use 4 additional types of dialysis solutions:

1. Gl.1* – in patients with diabetes, malnutrition, or hepatic metastatic neoplasm;
2. Mg0.5* - in patients suffering from hypermagnesemia due to the magnesium-based phosphate binders;
3. Ca1.25*– in patients with suspected a dynamic bone disease with PTH >100;
4. K3*– in hypokalemic patients.

(*=numbers reflect concentrations in mmol/L for K, Mg and Ca, in g/L for Gl.)

Results

Using the glucose-based dialysis solution resulted in a decrease in the number of hypoglycemic incidents and thus the glucose consumption for hypoglycaemia treatment. The PTH level has increased to normal values in patients dialyzed with Ca 1.25 solution. In patients with Mg 0.5 solutions, the risk of bradycardia, cardiorespiratory arrest, muscular weakness, paralysis, dizziness and confusion, depression of the state of consciousness decreased. Neuromuscular disturbances and cardiac arrhythmia decreased in patients using K3 dialysis solution.

Conclusion/Application to practice

The advantages of adapting the dialysis solution to the patient's needs are numerous, although it is more demanding for the medical staff. The number of dialysis-related adverse incidents has decreased making treatment safer for the patients.

Disclosure: No conflict of interest declared

E-P 031

Terminal stage oncology patients on haemodialysis – case report

A. Bastar[1]

[1]Fresenius, Bucuresti, Romania

Background

The number of hemodialysis patients with oncological diseases is increasing. This is a challenge for the patients' families and the healthcare team.

Objectives

To show the importance of the cooperation between patient's family and hemodialysis health care team when caring for an oncological patient.

Methods

Our centre has 346 patients (50% males), 12.4% (43) suffer from oncological diseases. Our case study is a 65-year-old female patient, with terminal stage breast cancer, on haemodialysis treatment since October 1982. Diagnosed in 2012 with cancer, is ongoing chemotherapy. The patient had different types of vascular accesses, since 2004 she has a femoral graft. The study evaluates the cooperation of the patient's family and the healthcare team.
The patient's family has been educated to support the staff within the scope of cancer therapies. Nurses participated in regular training on haemodialysis and vascular access care for oncologic patients. The vascular access has been better managed by including regular ultrasound examinations.

Results

The understanding of the family helped the patient and the staff to cope with psychological and ethical challenges.

Conclusion/Application to practice

The increasing number of cancer patients generated a need of changing clinical staff perception of patient care.
This case study shows that the cooperation of the family, besides the care of the healthcare team, can be very important in addressing the specific requirements of a cancer patient.

Disclosure: No conflict of interest declared

E-P 032

Admission of elderly chronic kidney disease patients to a haemodialysis unit

I. Iliescu[1]

[1]Fresenius, Bucuresti, Romania

Background

Chronic kidney disease (CKD) is a large and growing problem among the aging population. As a consequence of aging of the haemodialysis population, new issues have emerged; management of an elderly hemodialysis patient includes assessment of functional and psychosocial abilities, such as mobility, sensory perception, family support, mental status, and special care service from our medical staff.

Objectives

Quality of life is an important issue for haemodialysis patients, including the elderly. The aim of this study is to analyse the number of the new CKD patients over 70 years (in following the elderly) undergoing haemodialysis in our clinic.

Methods

Between 2011 and 2016, we evaluated the number of new admissions to our unit, in total and the share of the elderly to understand the increase of caring needs.

Results

During 2011 and 2016, the following numbers of patients were admitted to our clinic:

- 2011 - 35 patients, including 8 elderly (22.9%)
- 2012 - 19 patients, including 6 elderly (31.6%)
- 2013 - 14 patients, including 5 elderly (35.7%)
- 2014 - 24 patients, including 8 elderly (33.3%)
- 2015 - 20 patients, including 5 elderly (25.0%)
- 2016 - 49 patients, including 18 elderly (36.7%)

In summary, in the observational period, out of 170 patients admitted, 50 (29.4%) were elderly.

Conclusion/Application to practice

The care service in our clinic has been now adapted to support the caring needs of the increased elderly patients and to improve their life expectancy. Haemodialysis is a life-saving therapy, despite its costs.

Disclosure: No conflict of interest declared

E-P 033

The relation between periodontal diseases, nutritional status, hospitalisations for cardiovascular causes in haemodialysis patients

D. Toma[1]

[1]Dialysis, Fresenius NephroCare, Iasi, Romania

Background

Periodontal disease is a treatable chronic inflammatory gum disease. The inflammation is associated with increased hospitalizations and cardiovascular disease (CVD) in end-stage renal disease (ESRD) patients. CVD is the leading cause of mortality in this population.

Objectives

To evaluate the relationship between periodontal disease and the nutritional status and number of hospitalizations for CVD in a cohort of hemodialysis (HD) patients.

Methods

We analyzed 101 HD patients (57 females, mean age 52.5Â±14.3 years). Periodontal disease assessment was performed by a licensed dentist, including measurement of the periodontal disease index (PDI) with its three components: gingival and periodontal index (GP), bacterial plaque index (PI) and the calculus index (CI). The patientsâ€™ nutritional status was assessed by means of the body fat (ż) and fat-free mass (˙M) percentages, measured by bioimpedance spectroscopy. Also, we collected the number of hospitalizations for CVD events from October 2015 until October 2016 from the patientsâ€™ medical files.

Results

In terms of the periodontal status, the mean GP value was 4.0Â±1.3, mean PI 1.8Â±0.9, and mean CI 1.3Â±0.7, respectively. The mean ż was 35.34Â±10.80 and ˙M 50.11Â±14.01, respectively. The PI was negatively correlated with ˙M ($p<0.01$) and positively with % BF ($p<0.01$). We did not observe any correlation between any PDI and the number of hospitalizations for CVD ($p>0.05$).

Conclusion/Application to practice

The severity of the bacterial plaque index was associated with a low ˙M. Unlike other studies, we did not observe any relationship between the severity of the periodontal disease and the risk of hospitalization for CVD events.

Disclosure: No conflict of interest declared

E-P 034

Relationship between overhydration, haemoglobin, and haematocrit values in Chronic Kidney Disease patients under haemodiafiltration

C. Matias[1], P. Martins[1], V. Miranda[1], L. Amado[1], J. Fazendeiro Matos[2]

[1]NephroCare Maia, Fresenius Medical Care, Maia, Portugal; [2]NephroCare Portugal, Fresenius Medical Care, Porto, Portugal

Background

Chronic Kidney Disease (CKD) is characterized by a slow and progressive loss of renal excretory capacity, due to the gradual reduction of glomerular filtration of toxic solutes produced by the body. Clinical manifestations of extracellular volume overload include peripheral oedema and congestive heart failure. (Durvasula; Himmelfarb, 2011)

Chronic overhydration (OH) contributes to high cardiovascular morbidity and mortality observed in the haemodialysis population. (Raimann J et al., 2008).

Objectives

To investigate the relationship between overhydration, haemoglobin, and haematocrit values in patients with CKD under online haemodiafiltration.

Methods

139 people, 72 (51.8%) were women, participated in this correlational study. Data collection was performed during January 2016 with a convenience sampling, including haemoglobin and haematocrit values. We analysed the patients' dry weight (DW) by clinical assessment, normohydration weight (NH) and OH by means of a bioimpedance device and using sociodemographic aspects.

Results

OH (L) was higher in male (1.5±1.2) than in female (1.1±1.0) patients (p=0.23). Correlation analysis was performed between the difference DW and NH with haemoglobin (r=-0.316, p<0.001) and haematocrit (r=-0.310, p<0.001) values, both were statistically significant.

Also, OH per se was slightly negatively correlated with the haemoglobin (r=-0.196,p=0.021) and haematocrit (r=-0.219, p=0.009) values.

Conclusion/Application to practice

We conclude that OH may influence the patients' haematocrit and haemoglobin values.

Disclosure: No conflict of interest declared

E-P 035

Pulmonary oedema and the patient with chronic renal disease

I. Ayvaz[1], E.U. Avdal[1], A. Karakoc[2], Y. Tokem[1], B. Ozgürsoy[1]

[1]Internal Medicine Nursing, Izmir Katip Celebi University, Health Sciences Faculty, Izmir, Turkey; [2]Turkish Nephrology, Dialysis and Transplantation Nursery Association, Turkish Nephrology, Dialysis and Transplantation Nursery Association, Izmir, Turkey

Background

The number of patients diagnosed with End Stage Renal Disease (ESRD) was 314 persons per a million in 2001 in Turkey, which has increased more than 2.5 times higher in nearly 10 years and reached 870 persons in 2013.

Results

Case: The male patient at 64 age applied to the emergency service due to problems such as fatigue, increasing health problems, chest pain and difficulty in urination. He was hospitalized as a result of the diagnosis of pulmonary edema and chronıc renal faılure.

Perception and management of health: The patient has HT in his health past in 13 years ago as well as KBY 6 years ago. He also suffered myocardia infartion in 2006. Taken to the emergency service, the patient received a stent upon the application of coronary angiography. In 2016, the patient was hospitalized to the cardiology department as diagnosed with Non-ST-MI upon the progress of atrial fibrillation during the hemodialysis treatment. Upon the completion of treatment, he was discharged 3 weeks later.

Nutrition and Metabolic Situation: The patient with the limitations of Na, K, P lost 8 kilos in the last 2 months as a result of decreased appetite and sense of taste as well as nausea.

Discharge System: The patient was +900 (liquid intake: 2300 Ml, liquid discharge: 1400 mL) including nocturia, pollakiuria and proteinuira

Disclosure: No conflict of interest declared

E-P 036

Depression and anxiety in end-stage renal disease patients receiving online-haemodiafiltration: A single-centre study

L. Amado[1], C. Sales[2], R. Tavares[2], P. Mena-Matos[2, 3], A. Santos-Silva[4], V. Miranda[1], E. Costa[4, 5], J. Fazendeiro Matos[6]

[1]NephroCare Maia, Fresenius Medical Care, Maia, Portugal; [2]Centre for Psychology at University of Porto (CPUP), University of Porto, Porto, Portugal; [3]Faculty of Psychology and Educational Sciences, University of Porto, Porto, Portugal; [4]Department of Biological Sciences, Faculty of Pharmacy, University of Porto, Porto, Portugal; [5]UCIBIO@REQUIMTE, University of Porto, Porto, Portugal; [6]NephroCare Portugal, Fresenius Medical Care, Porto, Portugal

Background

Depression and anxiety are mental health concerns in dialysis patients and have a negative impact on their life satisfaction and well-being. To date, there are only few studies on both concerns in ESRD patients and their association with several socio-demographic, clinical, and biological measures.

Objectives

Assess anxiety and depression levels of online-haemodiafiltration patients regarding various parameters.

Methods

Cross-sectional study. 97 online-haemodiafiltration patients (39.2% males; 69.86±14.03years). Sociodemographic data, comorbidities, haematological data, iron status, dialysis adequacy, nutritional and inflammatory markers were collected and depression and anxiety evaluated (HADS scale, validated to the Portuguese population).

Results

20.6% of the patients had mild and 29.9% moderate/severe symptoms of depression. 27.8% reported mild and 16.5% moderate/severe symptoms of anxiety. 11.0% of all patients reported symptoms (moderate or severe) of both anxiety and depression.

Statistically significant results were:

- Depression and anxiety levels were higher in women than in men.
- Older patients (r=0.288) and with lower education levels (r=0.323) had higher depression levels.
- Depression was correlated positively with Body-Mass-Index (r=0.283, p=0.033), Fat-Tissue-Mass (r=0.304, p=0.023), and Charlson Comorbidity Index (r=0.275, p=0.039).
- Depression was correlated negatively with systolic (r=-0.274, p=0.039) and diastolic (r=-0.329, p=0.012) predialysis blood pressure.
- Anxiety was correlated positively with fluid removal levels (r=0.298).
- In men, depression was correlated negatively with serum albumin levels (r=-0.346, p=0,036).

Conclusion/Application to practice

In online-haemodiafiltration patients, depression was more prevalent than anxiety and more present in females. Any relationship between depression and anxiety and important clinical and treatment parameters require strategic options for early diagnosis and treatment of psychological disorders in order to improve patient outcomes.

Disclosure: No conflict of interest declared

E-P 037

Balanced Scorecard as a monitoring tool for dialysis care - A case study

E. Silva[1], V. Miranda[1], L. Amado[1], E. Costa[2, 3], J. Fazendeiro Matos[4], M.T. Parisotto[5]

[1]NephroCare Maia, Fresenius Medical Care, Maia, Portugal; [2]Department of Biological Sciences, Faculty of Pharmacy, University of Porto, Porto, Portugal; [3]UCIBIO@REQUIMTE, University of Porto, Porto, Portugal; [4]NephroCare Portugal, Fresenius Medical Care, Porto, Portugal; [5]Care Value Management, Fresenius Medical Care, Bad Homburg, Germany

Background

Balanced Scorecard (BSC) is a tool used to measure an organisation's activities and initiatives outlined in its strategic plan. Key Performance Indicators (KPIs) could be useful to support decision-making and improve the clinic's performance and management.

Objectives

To analyse the evolution of selected KPIs in a dialysis clinic of Northern Portugal.

Methods

We conducted a quantitative descriptive study evaluating all patients on dialysis in our clinic. We analysed the development of KPIs over a 32 month period (January 2014 - August 2016). KPIs selected were the effective dialysis treatment time, infusion volume, spKt/V, type of vascular access, hydration status, HBV immunisation, haemoglobin concentration, albumin, and phosphate serum levels.

Results

During the 32 month period, the following improvements were observed. At the beginning of data collection (January 2014), the KPIs compliance ratio was 73.73%, and at the end of the follow-up period (August 2016) it was 98.7% for patient outcomes with an overall average of 94.2%. Comparing January 2014 with August 2016, improvements in individual KPIs were observed in the effective dialysis treatment time (58.8 vs 89.6%), infusion volume (79.4 vs 93.8%), spKt/V (89.0 vs 97.9%), HBV immunisation (80.1 vs 98.6%), and albumin serum levels (51.5 vs 88.9%). Moderate improvements were observed in the type of vascular access (82.4 vs 86.8%) and hydration status (78.7 vs 82.1%). No significant improvements were observed in the haemoglobin concentration and phosphate serum levels.

Conclusion/Application to practice

This study showed an improvement of KPIs, probably resulting in better patient outcomes which could be related to successful BSC implementation.

Disclosure: No conflict of interest declared

E-P 038

Long hemodialysis session heparin free with citrate containing dialysate

J.M. Lagarde[1], M. Hermelin[1]
[1]Nephrology, Chu Toulouse, Toulouse, France

Background

In our polyvalent hemodialysis unit, DNTO Toulouse Rangueil University Hospital, we have many patients with high hemorragic risk: post surgery, hemostasis disorders.
They require quality hemodialys sessions without heparin addition in the blood set.
The Medical team set up a hemodialysis protocol for citrate dialysate since June 2016

Methods

The study was conducted with 102 patients
The citrate containing dialysate is without calcium.
The citrate combines with the calcium of the patient but there is a loss of calcium, which is been offset by an infusion of Calcium and Sodium

Results

Heparin is not received by the patient and there is a reduced risk of bleeding. This allows for long dialysis sessions more than 5 hours
We have had 98% success

Conclusion/Application to practice

This method of RCA allows long session of hemodialysis by diifusive transfer of citrate from the dialysate. It differs from usual technic of RCA, where the citrate is bring to the the filter in a predilution setting. Great volume are needed with the hypotonic solution (ACD-A) to bring the right amount of citrate.A free calcium dialysate induce a loss of calcium during the hemodialysis session. The mass transfer is easily calculated with Ionic Dialysance in our method. Amount of Calcium perfusion is not determined by the level of the pre-filter ionized calcemia as in the other technics.

Disclosure: No conflict of interest declared

E-P 039

The quality of life of dialysis patients

B. Krokowska[1], M. Krupinska[1]

[1]Dialysis station, B. Braun Avitum Poland, Brodnica, Poland

Background

The concept of quality of life is in addition to the assessment of human health. These studies are necessary to express subjective aspects of sick people.

Objectives

The aim of the study was to assess the quality of life of dialysis patients in dialysis centers in Golub Dobrzyń.

Methods

A group of 80 people treated in dialysis centers in Golub - Dobrzyń. The study was conducted in the months of March - April 2012. Interview technique was performed and a questionnaire designed independently evaluating the quality of life of patients on dialysis with elements characteristic of dialysis. The second tool is an abbreviated version of the former survey assessing the quality of life WHOQOL - in the Polish version.

Results

It was found that the quality of life of dialysis patients does not depend on factors such as age, education, source of income, changes in the appearance of the dialysis period. Marital status affects the quality of life of patients on dialysis in the field of psychology.

Conclusion/Application to practice

Most of the people in this study did not know the cause of his illness or the need to increase awareness of people on dialysis and expand education about the factors for the disease.

Disclosure: No conflict of interest declared

E-P 040

Instructing Haemodialysis Patients and Their Relatives Leads to Elevated Quality Protein Intake

A. Unal[1], E.E. Cicek[1], H. Kuheylan[2], E. Bulbul[3], A.M. Sarıkaya[1], C. Sayan[4]

[1]Haemodialysis Clinic, Antalya Training and Research Hospital, Antalya, Turkey; [2]Nutrition Clinic, Antalya Training and Research Hospital, Antalya, Turkey; [3]Faculty of Health Sciences, Bezmialem Vakif University, İstanbul, Turkey; [4]Dialysis Department, Bezmialem Vakif University, Istanbul, Turkey

Methods

This study included 26 male and 44 female (n=70) HD patients at the dialysis unit of Antalya Training and Research Hospital.

All the patients were low socioeconomic ladder and possessed green cards (a non-contributory health insurance scheme in Turkey). In 2015, the patients were given diet supplements with high quality protein on the days of dialysis sessions.The supplements consisted of two hard-boiled eggs in the morning (the patients were persuaded to eat at least the whites of two eggs in every session), other the breakfast, meals containing meat at lunch, and meringues (baked egg white and sugar). Consequently, the patients were able to consume foods rich in quality protein during HD sessions, which they could not otherwise consume at home.

Results

Mean levels of ALB, total protein (TP) and haemoglobin (Hgb), and mean Kt/V values of patients in 2014 and 2015-2016 were compared using paired t-tests. The levels of ALB (from 3.6 to 3.7 g/dL), TP (from 6.56 to 6.88 g/dL), the values of Kt/V (from 1.46 to 1.58) were statistically significant increased (p<0.05). The levels of Hgb increased from 11.01 to 11.23 g/dL, but this difference was not statistically significant. We conclude that the crucial element of the diet supplements that we recommend and serve to patients during HD sessions is not the quantity, but the presence of high quality protein, which improved the patients' quality of life considerably.

Disclosure: No conflict of interest declared

E-P 041

Secondary bacteraemia due to CVC in haemodialysis patients

F.L. Presentati[1]

[1]Hemodialysis, S Orsola Malpighi, Bologna, Italy

Background

Vascular accesses are a crucial point in a correct dialysis treatment. Artero-Venous Fistula (FAV) are the ideal access but, among people that cannot have it, permanent cuffed tunnelled central venous catheter is the most used device.

Objectives

We evaluated secondary bacteraemia incidence due to the presence of PCTCVC in hemodialysis patients and clinical correlations

Methods

We investigated retrospectively all hemodialysis patients with PCTCVC that underwent treatment between 2011 and 2015 in Sant'Orsola University Hospital Nephrology Unit. We collected all clinical data from patient's dialysis charts.

Results

79 patients had PCTCVC, medium age was 75,3±12,3 years, 48 were males. Medium survive of CVC was of 3,8±0,3 years. Bacteraemia's incidence resulted 0.52 pro 1000 catheter days. The probability to be free from infections in CVC resulted 81,6% in 12 as in 24 months. 16 patients presented bacteraemia compared with 63 patients without bacteraemia; there were no differences in terms of sex, age, diabetes, onset of ischemic cardiopathy. The residence time of CVC (12,4±15,2 vs 21,8±16,0 months) resulted significantly different. Infections in other sites (31,3% vs 4,8%) were detected meanwhile CVC infections. Peripheral artery disease were predominant in bacteraemia group (93,8% vs 64,1%). Death rate was the same.

Conclusion/Application to practice

PCTCVC has a higher risk of infections. As predictive risk factors for infections in CVC we detected the presence of peripheral artery disease and the presence of a previous infection presented in another district. Nevertheless, there were no differences in death rate between CVC infection's patients and those without.

Disclosure: No conflict of interest declared

E-P 042

Changes in the haemoglobin values of haemodialysed patients

E. Szarka-Tormási[1], F. Gerhák[1], S. Keresztesi

[1]Dialysis Centre, Fresenius Medical Care, Kecskemét, Hungary

Background

Anaemia is a common concern in the clinical care of haemodialysis patients. The best way to reduce anaemia is to minimise the patients' blood loss by nursing interventions.

Objectives

The aim of this work is to assess whether the patients' haemoglobin levels are influenced by increasing the reinfusion volume in chronic haemodialysis patients or whether haemoglobin levels changes in relation to the transferrin level.

Methods

We analysed the laboratory results of 40 patients at two different times. At first, we assessed the period from May until June 2014 when blood reinfusion volume was 240ml, which was increased up to 320-460ml according to the surface of dialyser. From February to September 2015, we then set the target of transferrin saturation up to 40% by increasing the dose of iron injection.

Results

The increased reinfusion volume resulted in an average increase of Hgb levels of 1.65g/L, while the dose of beta-epoetin was reduced by 7µg on average. The mean haemoglobin levels increased from 109.3 to 110.95g/L (p=0.138). The average beta-epoetin dose decreased from 127.75 to 120.75µg (p=0.034) and to 100µg later in December 2015, respectively. By increasing iron dose, the average beta-epoetin dose decreased from 109.67 to 90,34µg (p=0.028) from February to September 2015. Hgb levels decreased from 110.1 to 106.1g/L (p=0.14306) in the same period.

Conclusion/Application to practice

By increasing the reinfusion volume, the initial erythropoietin dose could be reduced until the end of the second year. We observed a similar reduction in beta-epoetin dose by elevating the patients' iron intake.

Disclosure: No conflict of interest declared

E-P 043

From drug-abuse to hemodialysis

M. Asztalos[1], J. Szegedi[1]

[1]Dialysis Center #2, B. Braun Avitum Hungary Dialysis Network, Nyíregyháza, Hungary

Background

The use of party drugs is increasing concern among teenagers and young adults. Most of these drugs are processed with dangerous chemicals and therefore can have unexpected short term and long term side effects.

Objectives

We are presenting a case stady of a 28 year-old male patient who has presented to the ER with one month history of fatigue, low appetite and facial edema. Initial work-up has revealed elevated waste product levels, low albumin level, mild anemia and hyperkalemia. Ultrasound showed mild pericardial effusion.

Methods

Course of Disease

Albumin replacement and transfusion was needed to correct the circulating volume. As his renal function did not improve on supportive therapy, hemodialysis treatment was initiated due to uremic symptoms. Kidney biopsy was performed and histology was corresponding with immune-mediated proliferative glomerulonephritis with over 20% of crescents and sclerosis. Since than the patient remained dialysis dependent.

Results

Anamnestic data revealed that patient has been on cristalmet (metamphetamine) for 2 years. He first experienced the drug at the bar and since than became addicted using the drug twice daily.

Conclusion/Application to practice

Although there is no direct evidence, it is most likely that the drug abuse could lead to the severe kidney damage in this case. Metamphetamine acts mostly on the central nervous system, but the chemicals used during the stove-top preparation of the drug can lead to chronic damage.

Disclosure: No conflict of interest declared

E-P 044

Successful treatment of HVC infection in hemodialysed patient

K. Tiroly[1], T. Szabo[1]

[1]Dialysis Center #14, B. Braun Avitum Hungary Dialysis Network, Kistarcsa, Hungary

Background

Hepatitis-C virus (HCV) infection in 85-90% of the patients results in chronic hepatitis with the presense of the virus causing slow progression to liver failure. End stage renal disease (ESRD) patients on hemodialysis with suppressed immune system are at higher risk for either contagion or the progression of the viral disease.

Objectives

New non-interferon therapeutic agents against HCV had been introduced lately with over 90% success rate and a low profile of side effects.

Methods

We are presenting the case of a 54-yearold male patient on hemodialysis for 3 years. He never had symptoms of acute hepatitis, but HCV positivity was diagnosed along with his renal failure.

Results

Combined treatmant for 12 weeks with Viekirax and Exviera was performed with no side effects. HCV titer of 131000 IU/ml before treatment has turned into negatíve. Our patient was declared virus-free.

Conclusion/Application to practice

Our caseshows that ESRD patients can also benefit from the new non-interferon based antiviral treatment for chronic HCV infection. Eradication of HCV from dialysis unit can eliminate the worry of contamination and make it a safer environment for the other dialysis patients.

Disclosure: No conflict of interest declared

E-P 045

Use of intravenous iron sucrose in darbepoetin-treated haemodialysis patients: establishing a safe dosage regimen

C. Flores[1]

[1]Renal Anaemia, Barts Health NHS Trust, London, United Kingdom

Objectives

This study aimed to determine whether less frequent high doses intravenous iron sucrose administration is as effective and well tolerated as frequent low doses.

Methods

In a retrospective data analysis of 70 darbepoetin-treated haemodialysis (HD) patients, we compared the efficacy of two intravenous (IV) iron sucrose regimens: (1) frequent low doses of iron 100mg once weekly to monthly indices showed TSATS <25%, serum ferritin <500 ng/L, or both,and (2) less frequent high doses of iron 200mg twice monthly indices showed TSATS <40%, serum ferritin <700 ng/L, or both,for two consecutive HD sessions. The darbepoetin therapy was not been changed for at least six weeks prior to the commencement of the two regimens and it was titrated to maintain target haemoglobin (Hb) levels. The Hb concentration, serum ferritin (SFer), transferrin saturation (TSAT), c-reactive protein (CRP) and darbepoetin dose were monitored monthly.

Results

Mean SFer for frequent low doses: 544 µg/L; less frequent high doses: 730 µg/L. Mean change in Hb from baseline to evaluation period was not clinically relevant. There was no statistically significant difference in TSAT and CRP results. There was a significant decrease in mean weekly darbepoetin alfa dose requirements using less frequent high doses IV iron sucrose from 27.5 µg/week at baseline to 22.5 µg/week.

Conclusion/Application to practice

The results show that the less frequent high doses IV iron sucrose with higher target serum ferritin concentrations can significantly lower EPO requirements. It can also be well tolerated and more effective treatment regimen for HD patients with renal anaemia.

Disclosure: No conflict of interest declared

E-P 046

A modificated version of GR-Simplified Medication Adherence Questionnaire for patients undergoing hemodialysis

V. Alikari[1], V. Matziou[2], M. Tsironi[1], N. Nikolopoulou[3], L. Theodosopoulos[4], M. Kotzia[5], A. Liossatou[6], S. Zyga[1]

[1]Department of Nursing, University of Peloponnese, Sparta, Greece; [2]Department of Nursin, National and Kapodistrian University of Athens, Athens, Greece; [3]Hemodialysis Unit, General Hospital of Nikaia "St. Panteleimon", Pireaus, Greece; [4]Hemodialysis Unit, General Hospital of West Attiki "St. Varvara", Athens, Greece; [5]Hemodialysis Unit, General Hospital of Korinthos, Korinthos, Greece; [6]Hemodialysis Unit, General Hospital of Kefallonia, Kefallonia, Greece

Background

Nonadherence to the therapeutic regimen is an increasingly growing problem especially among patients undergoing haemodialysis.

Objectives

The aim of this study was to modify the Greek version of Simplified Medication Adherence Questionnaire (GR-SMAQ) for patients undergoing haemodialysis (GR-SMAQ-HD) and explore its validity and reliability.

Methods

Between June 2016 and November 2016 a group of patients undergoing haemodialysis (N=107) completed the Greek version of SMAQ. The study was carried out in the three Dialysis Units of the Hospitals in Athens and the Peloponnese region, Greece. The form of GR-SMAQ was modified specifically for renal patients while four additional items were added so that the tool covered all aspects of adherence to the haemodialysis regimen. Construct validity was checked through exploratory factor analysis with principal Component Analysis with the Equamax method. Test-retest reliability and internal consistency were tested. Statistical analysis was performed using the IBM SPSS Statistics version 21. The significance level was set up at 5%.

Results

The Greek version of SMAQ for patients undergoing haemodialysis includes eight questions. Three factors emerged from factor analysis. Cronbach's a coefficient was 0.742 for the whole scale and for each subscale was for "Medication Adherence" 0.75, for "Attendance at haemodialysis session" 0.856 and for "Diet/Fluid restriction" was 0.717. The total mean score was 6.29 (±1.82).

Conclusion/Application to practice

GR-SMAQ-HD is a reliable and valuable tool that can be used by haemodialysis nurses and students of nursing for detection of adherence levels in clinical practice.

Disclosure: No conflict of interest declared

E-P 047

Home haemodialysis – theory into practice

R. Vojancová[1]

[1]Haedquarter and dialysis unit, B. Braun Avitum s.r.o, Prague, Czech Republic

Background

Home haemodialysis is a suitable alternative to haemodialysis therapy in dialysis centres, for patients with chronic renal failure.

Since 2016, patients in the Czech Republic have benefited from this method of treatment of chronic renal failure. B. Braun Avitum Ltd. responded to this change with expansion of its portfolio of services for this particular therapeutic method.

Objectives

To introduce the home haemodialysis method into practice.

To define requirements for implementing the method.

To allow patients to perform haemodialysis treatment in the comfort of their homes.

To increase the quality of the provided care.

Methods

The author shares the experience of putting the home haemodialysis method into practice.

The process of project initiation (creation) of the home haemodialysis included the following areas:

- technical
- personnel
- insurance
- communication of the home haemodialysis
- communication materials
- training process
- waste collection

Results

Five months from the beginning of the project we managed to put the home haemodialysis method into practice.

Conclusion/Application to practice

The method of home haemodialysis can be successfully used to treat patients with chronic renal failure with respect to their needs as for their health and lifestyle:

a) at home (not necessarily at home, but where the patient lives) with the help of family members (occasionally with help of nurses)

b) assisted home dialysis in for example social care institutions, homes for the elderly as well as prisons.

After 9 months of treatment, our first patient said her unequivocal YES to this method, which improves the quality of life.

Disclosure: No conflict of interest declared

E-P 048

In-center self-care hemodialysis - MyHemo - alternative for stardard dialysis treatment

N. Reinikka[1] **N. Sinisalo**[1]

[1]Kidney Center, Pirkanmaan sairaanhoitopiiri, Tampere, Finland

Background

This unique clinic was developed to give patients their independence back. This is integrated care where all the required services are found in the same building - a kidney ward, a dialysis unit and an outpatient department. Functional planning and service design was made with the patients before the new Kidney Center of the Tampere University Hospital was built. Service design has included patients to build their own dialysis unit.

Objectives

The idea of a new way of self-care as in-center home hemodialysis came from patients to improve their quality of life. The MyHemo concept offers individual, secure, cost-effective, high quality dialysis.

Methods

Observational methods were designed to elicit customer needs and values and the results were built into the MyHemo concept. Conclusions were made from project team´s sessions, daily diaries, video filming and developing Kidney Center´s service paths.

Results

After a tailored training the patient can choose either to undertake dialysis at home or at the Kidney Center´s dialysis rooms. MyHemo is specially built with all equipment needed for dialysis and it does not need any staff. The patient can book a session according to the patient's schedule and lifestyle. There is also an interactive tool to understand and follow up one's levels of learning.

Conclusion/Application to practice

We provide high standard in-center self-care hemodialysis. When the patients perspective comes first, they maintain their independence and hope.

Disclosure: No conflict of interest declared

E-P 049

External audit at the dialysis centre

H. Jeřábková[1]

[1]Dialysis unit, B. Braun Avitum s.r.o., Litoměřice, Czech Republic

Background

The aim of this paper is to share our experience with external audit system in the Dialysis Centre in Litoměřice.

Objectives

The objective was to demonstrate that our Centre meets the requirements for obtaining the certificate, which certifies the approved quality system, environmental system and safety in the Dialysis Centre.

Methods

External audit involved of three phases:

- Preparation for external audit, which was conducted in collaboration with headquarters and involved all processes.
- The external audit, which was performed by a certified organization - TÜV SÜD. The audit put special emphasis on adherence to the quality and safety of care as well as environmental protection. Quality of care was assessed from two perspectives - individual performance standards and monitoring the overall quality of care.
- Corrective and preventive measures.

The audit applied not only to the employees but also to the patients.

Conclusion/Application to practice

The audit was motivating for us. The goal was not only to identify shortcomings but also to bring problematic areas to light. The audit assessed the quality of care and compared it with international level of care. Following a successful external audit, we have fulfilled the requirements for obtaining the ISO 9001:2008, ISO 14001:2004 and Good Dialysis Practice IEC/TR62653 certificates issued by TÜV SÜD PS.
Successful completion of the audit proved that individual processes have been set correctly.

Disclosure: No conflict of interest declared

E-P 050

The highlighted role of dialysis nurses in improving the quality of life on haemodialysis

K. Lovas[1], Cs. Horváthné[1], I. Kiss[1], B. Biro[1]

[1]1st Dialysis Center, B. Braun Avitum Hungary, Budapest, Hungary

Objectives

Our aim was to introduce patient support by dialysis nurses in haemodialysis. We measured the effect of 13 factors on the quality of life taking sex, age and comorbidities into consideration.

Methods

107 of 165 patients on chronic haemodialysis filled out the Illness Intrusiveness Rating Scale questionnaire in 4 age groups (<40; 40-64; 65-80; >80 years). We followed the distribution of comorbidities and the Illness Intrusiveness Rating Scale in each age group.

Results

The incidence of comorbidities is almost the same in the groups older than 40 years. 89-96% of the participants older than 45 have hypertension and 45-47% have diabetes. Malignancy often occurs with aging and heart disease is frequent among the elderly. The impact of illness is dominant regarding general health, nutrition and job in every age group. There is a difference between the age groups with regard to the judgement of the financial effect of the diseases. According to our questionnaire, quality of life is less affected over 80 years when compared to the results of international studies but has an important role among the younger population. Our purpose is to build up and manage a personalized project to help our patients.

Conclusion/Application to practice

Impact factors are different by age. Results are comparable to international studies. Patients require help dedicated to their problems in the healthcare and social network. The engagement of a well educated dialysis nurse is vital.

Disclosure: No conflict of interest declared

E-P 051

Role of wound care coordinating nurse in the dialysis units

R. Gribets[1], Z. Gavish[1], I. Rafaelov[1], S. Ben Shitrit[2]

[1]Nephrology and Hypertention, Rambam-Health Care Campus, Haifa, Israel; [2]Plastic Surgery Department, Rambam-Health Care Campus, Haifa, Israel

Background

Dialysis patients are prone to develop poorly healing wounds. As complex patients, they use more health services and professionals than others. Dialysis patients are overwhelmed with the stringent requirements of dialysis, and tend to overlook other aspects of their care, particularly foot care. In order to reduce the risk of foot ulcerations and subsequent amputations, the position of wound care coordinating nurse (WCCN) was created. The concept of WCCN position is based on patient-centered approach. By presenting a case study of 75 YO dialysis patient with a foot ulcer we describe the role of the WCCN

Objectives

Wound development prevention by early assesment and intervention
Patient & family education and empowerment for self management skills development
Staff education
Appropriate wound treatment following Evidence Based Practice
Multidisciplinary teamwork coordination

Methods

Appropriate treatment was selected with the cooperation of hospital's wound care coordinator. The continuous treatment and follow-ups were carried out by the unit's nurses during dialysis sessions with the use of different communication methods. Staff education took place during staff meetings

Results

The wound was completely healed within 8 weeks

Conclusion/Application to practice

The arrival of patients to the dialysis unit presents a window of opportunities for follow-ups, continuous treatment and patient education. The appointment of the WCCN in the dialysis unit and staff education, has the potential to improve outcomes of the wound treatment, and to reduce the number of lower extremities amputation cases. Using the media to contribute to effective multidisciplinary teamwork coordination. WCCN is an essential position at any dialysis unit

Disclosure: No conflict of interest declared

E-P 052

Dialyser categorization state and heparin doses

J. Fazendeiro Matos[1], R. Peralta[1], B. Pinto[1], C. Felix[1], P. Ponce[2]

[1]NephroCare Portugal, Fresenius Medical Care, Porto, Portugal; [2]NephroCare Portugal, Fresenius Medical Care, Lisboa, Portugal

Background

During the last decades, the safety and efficiency of haemodialysis treatment has improved significantly. Despite these achievements, extracorporeal blood circuit (ECC) clot prevention remains a significant challenge in many patients. There are a number of factors favouring ECC coagulation, e.g. heparin UI/kg dose, low blood flow, high haematocrit, high ultrafiltration rate, treatment modality.

Objectives

To assess the correlation between

- The anticoagulation dose and dialyser state (classified in categories) and dry weight.
- Dialyser categories and treatment outcomes.

Methods

We conducted a multi-centre, descriptive-correlational study for one month and enrolled patients according to the inclusion criteria. Nurses received previous training to assess/classify the dialyser's state (classified into five categories) and the venous drip chamber (classified into three categories).

Results

3,107 patients were enrolled, mean age was 69.25 (SD=13.74) years and 69.3% were male. The average haematocrit was 33.85 (SD=3.48%), mean dry weight 68.27 (SD=13.31kg). Mean heparin dose was 58.77UI/Kg. Only 32.4% of the patients had a clean dialyser at the end of the treatment. Although the relationship between heparin dose and dialyser category is weak and negative ($r=-0.322$), it has statistical significance ($p<0.001$). Dialysers classified as “Clean” showed an average heparin dose of 67IU/kg. Patients with higher dry weights showed a lower heparin dose and had a higher tendency for clotted dialyser fibres. The relationship between haematocrit, ultrafiltration and dialyser aspect was very weak, but had statistical significance.

Conclusion/Application to practice

Patients with higher dry weights were often treated with lower heparin doses. Patients with lower heparin doses showed a higher tendency for clotted dialyser fibres.

Disclosure: No conflict of interest declared

E-P 053

Chronic kidney disease and functional health patterns model: Case report, Turkey

E.Ş. Kirpitçi[1], E. Ünsal Avdal[1], B.N. Özgürsoy Uran[1], S. Şentürk[2]

[1]Faculty of Health Science, Izmir Katip Celebi University, Izmir, Turkey; [2]Tepecik Training and Researc Hospital, Nephrology, Health Science University, Izmir, Turkey

Background

Chronic Kidney Disease (CKD) is an important public health problem which has become an epidemic in Turkey and in the World. Chronic Kidney Disease (CKD) is a renal syndrome which develops depending on various diseases and which is characterized with chronic, progressive and irreversible nephron loss. CKD is defined as the situation of the speed of kidney damage and/or glomerular filtration rate (GFR) which lasts for at least for 3 months with less than 60 ml/min/1,73 m^2 regardless of the etiology of the underlying kidney disease. Causes are diabetes mellitus, hypertension, glomerulonephritis and diabetic neuropathy.

In chronic kidney disease, the health team should plan and offer the suitable treatment and care according to the needs of the patient.

Objectives

Functional Health Patterns Model (FHP) is used commonly in Turkey. It is the pattern model which is preferred most for the planning, practice and evaluation of nursing care and practices.

Results

I.E. (69y) is a farmer, visited the hospital because of pain in the chest and he was referred to the cardiology clinic for coronary angiography with atrial fibrilation diagnosis in EKG. The patient had Diabetes Mellitus (for 18years), Coronary Artery Disease, Coronary Failure (10years) and Chronic Kidney Disease (5years). The patient's renal failure has developed over many years caused by diabetes mellitus.

In this case, problems were observed in the field of FHP such as activity, exercise, nutritional-metabolic, cognitive-perceptive and perceiving oneself. The diagnoses and interventions are also for these FHP fields.

Disclosure: No conflict of interest declared

E-P 055

Accreditation a Blessing or a Curse - A personal perspective / experience

I. Romach[1], I. Gutman[1]

[1]Dialysis, Tel Aviv Souraski Medical center, Tel Aviv, Israel

Background

Patients' safety is a goal of treatment and should be approached differently according to context. There are several standardization systems worldwide. At our hospital we are being audited by the American Joint commotion International (JCI). The financial burden and the time-consuming efforts of the preliminary preparations and maintenance are very high and sometimes, at the expense of other necessities. We are obliged to learn the standards by heart, and there is no space for personal input.

Objectives

- To identify opinions of the multidisciplinary team worldwide on the Standardization process and External audit
- To compare world-wide attitudes to the process

Methods

Members of the multidisciplinary team at our hospital, at other hospitals in our country and from countries in Europe were asked an open question: What do you think about Standardization and External audit?

Results

All participants agree that an audit is necessary to maintain quality of care. However, there are different approaches to this issue. Many feel that they are playing a role in a show, as there is only one correct answer to each question which should be learned by heart. During the preparations the staff is transformed from individuals to automats. During the audit, the hospital becomes a sterile area that does not represent the normal daily activities. The day following the audit all behavior returns to the original pattern of behavior where creativity and original thinking prevails.

Disclosure: No conflict of interest declared

E-P 056

Improving nursing treatment of hospitalized ESRD patients

I. Romach[1]

[1]Nephrology, Tel Aviv Souraski Medical Center, Tel Aviv, Israel

Background

Patients with serious conditions, multicomorbidities like End Stage Renal Disease (ESRD) are more likely to suffer from adverse reactions. From our experience, we find that the nurses in the general wards are not familiar enough with the special treatment needs of ESRD patients. Speaking with our patients enlightens this need. Admission of a wrong diet, peripheral vein lines and measuring blood pressure on AVF arm occurs. Knowledge sharing helps nurses understand and provide appropriate treatment which influences the quality of care.
Recently, new software was implemented in our hospital. We felt that the general nurses required guidance on how to recognize the new format of treatment reports.
New standardization processes need better communication between the wards.

Objectives

- Improve hospitalized ESRD patients' safety by increasing the knowledge of the general wards' nurses on these patients' special needs.
- Improve the professional communication between the nurses in the general wards and in the dialysis unit.
- Implement Accreditation standards between the dialysis unit and the general wards.

Methods

We performed a study day addressing all nurses of the hospital, from general wards and intensive care units. The topics included general basics of Haemodialysis, Peritoneal dialysis, Vascular access, Peritoneal access, as well as ESRD patients' specific dietary needs and their social rights. We introduced the new treatment report format and the importance of each component within it.

Results

Statistics will be presented at a later stage.

Conclusion/Application to practice

Since the Study Day, communication between nurses has improved. The participants also updated their colleagues with the new processes.

Disclosure: No conflict of interest declared

E-P 057

Evidence Based Practice: our reality

C. Santos-Cunha[1], M. Fonseca[1], C. Pereira[1], A.P. Martins[1], T. Magalhaes[1], C. Cunha[1], M. Cunha[1], J. Pinheiro[1, 2], J. Fazendeiro Matos[3], M.T. Parisotto[4]

[1]NephroCare Fafe, Fresenius Medical Care, Fafe, Portugal; [2]Health Science Institute, Portuguese Catholic University, Porto, Portugal; [3]NephroCare Portugal, Fresenius Medical Care, Porto, Portugal; [4]Care Value Management, Fresenius Medical Care, Bad Homburg, Germany

Background

The Evidence Based Practice (EBP) is a coherent, safe and organised way of establishing professional practices in order to optimise all available resources, involving all stakeholders in the therapeutic and decision-making process.

EBP represents the “integration of the best research evidence with patients' values and clinical circumstances in decision making” Upton et al. (2014).

Objectives

To describe how EBP is implemented and applied.

Methods

We conducted a quantitative and descriptive study. The EBP Questionnaire (EBPQ) was applied, i.e. a 24 items Likert-type scale of seven points with more points representing a better implementation of EBP. The EBPQ is divided into three subscales: practice, attitude, and knowledge/skills. Inclusion criteria are: healthcare professionals who perform functions in the clinic. Data were collected in November 2016.

Results

Almost every question revealed an average score of 5 or higher, showing that our healthcare professionals are aware of the importance of EBP. However, there were three items with an average score lower than 5: “Research skills”, “Monitoring and reviewing of practical skills” and “Converting your information needs into research questions”. These three items belong to the third subscale” knowledge/skills”.

Conclusion/Application to practice

The results in the subscale “knowledge/skills” show that the greatest difficulty we have as health professionals is to implement EBP into our day-to-day practice and raise new issues that can be validated later in optimised treatment results. It is fundamentally important to identify, in terms of EBP, obstacles and attitudes, regardless of whether they have a personal, professional, scientific or organisational origin.

Disclosure: No conflict of interest declared

E-P 058

The nurse's role in improving the quality of medical care in dialysis centres

A. Preda[1]

[1]Fresenius Neprocare Romania, Fresenius Neprocare, Tulcea, Romania

Background

In literature Donabedian (2003) describes the quality of healthcare as: "that care, which is expected to maximize the size of patients' welfare, taking into consideration the balance of expected gains and losses, which might occur in all stages of the health care process."

The professional quality of medical care is related to the capabilities of the entire medical staff to provide appropriate standards of medical practice and to perform an effective management.

Objectives

To improve

- the quality of medical care
- the communication process between medical staff and patients.

Methods

From 2011 to 2016, nurses of a dialysis centre (part of a dialysis private network) took the following measures to improve the quality of the services provided:

-Involvement of nurses in patient education activities

- Ongoing education of nurses

- Implementation of national and dialysis network specific standards and processes of good practice.

Results

The results are measurable by analysing the surveys among patients:

We observed a trend towards increased patient satisfaction:

- In regards the dialysis centre by 4.4% (94.2% in 2011 versus 98.6% in 2013)
- In regards the conditions of dialysis by 7.8% (82.2% in 2011 versus 90% in 2013)
- In regards the work of the nursing staff by 6.2% (89.7% in 2011 versus 95.9% in 2013).

Conclusion/Application to practice

The quality of the medical care remains a permanent concern at our dialysis centre. The involvement of the nurses in increasing the quality of medical services provided is one of the mandatory conditions to obtain qualitative medical care to ensure patient satisfaction.

Disclosure: No conflict of interest declared

E-P 059

Evaluation of problem solving skills of peritoneal dialysis nurses

Z. Aydin[1], Y. Bakar[2]

[1]School of Health Services, Beykoz University, Istanbul, Turkey; [2]Organisation and Management, Adana Science and Technology University, Adana, Turkey

Background

The Peritoneal Dialysis (PD) nurse is the person who assumes the role of educator in teaching for peritoneal dialysis. Nurses must be be able to provide quality care, prevent complications and help improve quality of life using problem solving skills

Objectives

The aim of this study is to identify the self appraisal of problem solving ability of PD nurses.

Methods

Study conducted between January - February 2016 Eighty dialysis nurses enrolled in the study. The study was approwed by the local ethics committee. Personal Information Form and Problem Solving Inventory (PSI) scales were used to obtain the data.

Statistical analysis was carried out using SPSS software. Comparison between groups made via Mann-Whitney U test. Variables compared using One-way analysis of variance.

Results

Average age of nurses is 35.07±5.18, 83.5% were married, 72.5% had a child, 41.8% graduated with an associate's degree, 35.2% worked in primary health services, and 37.4% had been working in the profession for 16-20 years. It was determined 71.4% of participants had been working as PD nurses for 5-10 years. Nurses' problem-solving inventory (PSI) mean score was found to be low 77.48±14.75.

Conclusion/Application to practice

According to results obtained from the the study, training programmes developed based on "Problem-Based Training Model" for PD nurses are required.

The effect of training on problem solving competencies will be analyed.

We believe that with improvement of problem solving competencies nurses will be able to reduce patient complication rates by proposing effective solutions by using "problem-solving steps" in complications such as 'Peritonitis and Dialysis Inadequacy'

Disclosure: No conflict of interest declared

E-P 060

The sleep quality and its determinants among patients requiring renal replacement therapy.

A. Mróz[1], S. Grzybowska[1], K. Długoborska[1], I. Rozalska[1], A. Aftyka[1], V. Mianowana[2]

[1]Department of Anaesthesiological and Intensive Care Nursing, Faculty of Health Sciences, Medical University , Lublin, Poland; [2]Chair of Development in Nursing, Faculty of Health Sciences,Medical University, Lublin, Poland

Background

Sleep problems concern most of renal replacement therapy (RRT) patients. Sometimes it could be limited by delivering renal care, which takes the subjective opinion of RRT patients about their sleep problems into account.

Objectives

The aim of this study was to define the quality of sleep and the factors which affect the sleep disorders in opinion of RRT patients.

Methods

We examined 100 RRT patients. The study was performed by using questionnaire designed by the authors. Questionnaire consisted of questions relating to: demographic data, subjective assessment of mental comfort, sleep problems and main causes of sleep disorders among RRT patients. The patients were asked to express general quality of sleep by using a scale from 1 to 10 (1 - "very bad" and 10 - "very good").

Results

The survey was carried out among 100 patients: 75% haemodialysis patients, 16% peritoneal dialysis patients and 9% kidney transplant patients. Data analysis indicated the poor quality of sleep among RRT patients. Study showed that the elderly distinguished worse sleep in comparison with younger people and the patients living in the city had a better quality of sleep than living in the countryside ($p < 0,001$). Patients treated with hemodialysis perceived their sleep worse than patients treated with peritoneal dialysis and kidney transplantation. The pain and depressed mood had a greatest impact on the sleep disorders ($p < 0,001$). The patients who slept during the day, distinguished poorer sleep quality than other ($p = 0.002$).

Conclusion/Application to practice

Results should be used for planning the nursing renal care.

Disclosure: No conflict of interest declared

E-P 061

Calciphylaxis wounds in dialysis patients who received warfarin

V. Vernovsky[1], M. Koren[1], A. Schnaider[1], L. Shwarz[1]

[1]Nephrology, Soroka University Medical Center, Beer-Sheva, Israel

Background

Cardiovascular disease is the leading cause of death in patients with chronic kidney disease (CKD). Also, atrial fibrillation is common among CKD patients that receive anticoagulation therapy such as warfarin for embolic events prevention. Subclinical vitamin-K deficiency is known in Dialysis patients, while warfarin contributes to vitamin K inhibition and promotes calcification.

Calciphylaxis is a rare but fatal complication of end-stage renal disease. Risk factors can be categorized into several groups, such as local factors in adipose tissue, disturbance in mineral and bone metabolism, renal failure, gender, diabetes, inflammatory conditions, and others. The presentation of calciphylaxis includes painful necrotic ulcers, complicated by infections and even septicemia, with an 80% mortality rate.

During last years, five dialysis patients developed calciphylaxis with various forms of severity, all with atrial fibrillation and received warfarin treatment. A multidisciplinary approach of intensive therapy which included care of ulcers by topic ointments, wound debridement and maggot therapy, antibiotics for skin infections; pain control; optimization of control of hyperparathyroidism and intensification of low-calcium hemodialysis; nutrition support; thiosulfate as a chelating agent to bind calcium from tissues and hyperbaric oxygenation therapy. The treatment was successful in three patients, but the other two patinets died.

This leads to the following dilemma: administering warfarin for thromboembolic events in hemodialysis patients with atrial fibrilation versus potential development of calciphylaxis. Both conditions could lead to the patient death.

Disclosure: No conflict of interest declared

E-P 062

The benefits of combining local audit with national registry data to improve bone profiles

S. Gerty[1], S. Kennedy[1], S. Dickinson[1]

[1]Renal Medicine, Royal Cornwall Hospitals NHS Trust, Truro, United Kingdom

Background

The current UK target for phosphate (Po4) in HD is 1.1 – 1.7 mmol/L. Higher mortality has been demonstrated in hypo- and hyperphosphataemia. The 2013 Renal Registry (RRR) showed that there were more HD patients in Cornwall (16.5%) with Po4 <1.1 mmol/L, compared to the national average (12.4%).

Objectives

Our main aim was to improve our patients Po4 levels to target whilst exploring factors that may be contributory.

Methods

In April 2014 we retrospectively audited our HD population to identify any patients with Po4 <1.1 for ≥2 months in the previous 6 months, looking at BMI (kg/m^2), PTH (pmol/L), acute admissions, nutritional status and binder usage. **Findings:** 22 patients (16%) had Po4 <1.1. Of these, 12 had BMI <25, 15 had PTH <16 and 3 had been admitted to hospital in the time period. Nutritional assessment showed that 6 consumed inadequate dietary protein and 15 were taking binders. From this, our action plan was to increase dietary po4 and adjust or stop binders.

Results

Comparing data from the 2013 RRR with that of the 2015 RRR, we found an improvement in our results whereby only 11.8% of our patients now had Po4<1.1 compared to the national average of 13.5%. An improvement of 4.7% in our group.

Conclusion/Application to practice

Our findings suggest low BMI and inadequate dietary protein may contribute to hypophosphataemia in our HD population and that Po4 levels can be improved through tailored intervention. We feel the benefits of combining local audit with national data to make quality improvements should be highlighted.

Disclosure: No conflict of interest declared

E-P 063

Haemodialysis in Spain and Portugal: A heritage promoting patients' health

V. Henriques[1], J. Jesus[2], A. Fejude[2], F. Vieira[1], J. Fazendeiro Matos[3], M.T. Parisotto[4]

[1]NephroCare Braga, Fresenius Medical Care, Braga, Portugal; [2]NephroCare Centro de Diálisis León, Fresenius Medical Care, León, Spain; [3]NephroCare Portugal, Fresenius Medical Care, Porto, Portugal; [4]Care Value Management, Fresenius Medical Care, Bad Homburg, Germany

Background

Inadequate nutrient intake seems to be one of the most important causes of malnutrition in haemodialysis patients. Additionally, these patients often suffer from loss of appetite and dietary restrictions. According to several studies, Mediterranean diets reduce the cardiovascular risk and might maintain/improve renal function in chronic kidney patients.

Objectives

To assess the nutrient intake and Mediterranean eating habits of haemodialysis patients and their nutritional status.

Methods

Comparison of two groups of haemodialysis outpatients from a Spanish and Portuguese haemodialysis clinic (n=64), investigated by dietary follow-up and evaluation of standard anthropometric, biochemical, and dialysis parameters. Dietary evaluation was performed using a food diary on three days per week: one dialysis day, one non-dialysis and Sunday because it is atypical. Food diaries were analysed using the Nutrition–Nutwin software using data averages.

Results

The mean age was 69.37±12.87 years, and 74.29% of the patients were men. The body mass index was 26.13±4.52kg/m2 with a significantly higher standard deviation in females. An interdialytic weight gain of 1.51±0.62kg was observed with a Kt/V of 1.62±0.49. Calorie intake was 1,491±401kcal/day (18.9±8.7kcal/kg/day), and protein ingestion was 72.5±14.9g protein/day (1.3g/kg/day). According to the World Health Organization classification, 5.71% of the patients were malnourished, 42.86% were eutrophic, 40% were in a state of pre-obesity and 11.43% individuals were obese.

Conclusion/Application to practice

The present study suggests that Mediterranean diet is a good option, probably due to the use of healthy fats - such as olive oil - to replace saturated fats. However, at this stage we cannot conclude that it is the best option.

Disclosure: No conflict of interest declared

E-P 064

Evaluation of patients` nutritional status

E. Lampreht[1], S. Frumen Pivk[2]

[1]Nefrodial Celje, Fresenius Medical Care Slovenia, Celje, Slovenia; [2]Nefrodial Clinics, Fresenius Medical Care Slovenia, Ljubljana, Slovenia

Background

Malnutrition in haemodialysis patients is strong negative predictor of patients` quality of life as well as morbidity and mortality. It is often caused by low intake of protein, inflammatory process, catabolic processes, loss of nutrients, metabolic acidosis, secondary hyperparathyroidism, poverty, depression, physical inactivity.

Objectives

Prevention and early detection of malnutrition by the implementation of a dietary counselling programme and the administration of supplements.

Methods

Since 2015, we have been evaluating the nutritional status using a MIS (Malnutrition Inflammation Score) protocol. This protocol includes ten parameters: body weight, food intake, gastrointestinal symptoms, physical performance, comorbidity, number of years on haemodialysis, fat tissue, signs of muscle weakness, BMI, serum albumin, serum total iron-binding capacity. Each parameter was classified into four categories (from 0-3 points). Patients with an overall score of ³ 6 were classified into the risk group.

Results

Observational period covers a two- year period including 305 patients (59.3% males), from five dialysis clinics with a median age of 68 years.

Results showed a slight decline of the MIS in 2016 (5.73) as compared to 2015 (5.02). 40.69% of all patients had a MIS of ³6. The average MIS in these patients was 8.44. Percentage of patients with MIS of ≥6 in 2016 increased from 38.36 to 43%.

On average, 13 patients per clinic took oral supplements.

Conclusion/Application to practice

Despite the fact that 2016 results show a slight deterioration of the nutritional status, we still believe that means of careful monitoring of the patients` nutritional status and malnutrition can be detected early and timely treatment may be initiated.

Disclosure: No conflict of interest declared

E-P 065

Endemic (Balkan) Nephropathy is a worldwide problem

M. Mihalic[1], Z. Dika[1], B. Jelakovic[1], S. Karanovic[1]

[1]Dept. of Nephrology, Hypertension, Dialysis and Transplantation, UHC Zagreb, School of Medicine University of Zagreb, Zagreb, Croatia

Background

Endemic (Balkan) nephropathy (EN) is a chronic tubulointerstitial nephropathy affecting farmers living in rural areas of Bosnia, Bulgaria, Croatia, Romania, and Serbia.

Objectives

It has insidious onset and invariable progresses to end-stage-renal-disease. Peculiar characteristic is strong association with urothelial carcinoma of the upper urinary tract (UTUC). Research projects conducted in Croatia confirmed our hypothesis that chronic dietary poisoning by aristolochic acid is responsible for EN and its associated urothelial cancer.

Results

Aristolochic acid was found as a compound in various herbal products which were used as a part of traditional medicine for thousands of years worldwide. Interestingly, aristolactam DNA adducts and the same pattern of p53 mutation was found in patients with UTUC treated with so-called “natural medicine” containing aristolochic acid in many countries including Taiwan, United States, United Kingdom, Spain, Belgium etc.

Conclusion/Application to practice

Thus, EN should be considered as an environmental form of worldwide present aristolochic acid nephropathy.

Disclosure: No conflict of interest declared

E-P 066

Specific nutritional assesment and protein-energy wasting treatment in dialysis patients

M. Iveković[1] M. Maretić Dumić[1], L. Katalenić[1]

[1]Dialysis, KBC-Zagreb, Zagreb, Croatia

Background

Protein-energy wasting (PEW) is a state of decreased body stores of protein and fat masses which arises from inadequate nutrient intake and increased catabolism. Series of studies have described it as one of the main non-traditional risk factors associated with poor prognosis and treatment outcome in chronic kidney disease patients. It has been estimated that the prevalence of malnutrition in hemodialysis population is 18-75%.

Objectives

Nutritional assessment is an essential procedure in nutritional management. There are many diagnostic tools for PEW - biochemical indicators (such as albumin and prealbumin, cholesterol, creatinine), anthropometric measurements including body composition assessment, as well as functional and dietary assessments. Although these tools are simple, they are not perfect. This means that our decision must be based on more than one screening tool and it can be simplified by using malnutrition-inflammation score (MIS) which tried to unite the above mentioned diagnostic criteria. This is the reason why in 2014 we have started specific nutritional assesment based on MIS, anthropometric measures, dietary inteview and nutritional education.

Conclusion/Application to practice

Medical nurses actively participate in daily care of maintenance hemodialysis (HD) patients. She independently caries out nutritional screening and with participating in continuous education raises the awareness among patients helping them correct numerous disorders arising from inadequate nutritional intake such as hyperkalemia, hyperphosphatemia, excessive fluid intake, and protein-energy malnutrition. A multidisciplinary team which would actively participate in daily care of maintenance HD patients represents a constant need in every dialysis center and should not be perceived as luxury.

Disclosure: No conflict of interest declared

E-P 067

Life after death, or to live like everyone else - a case study

M. Nagy[1]

[1]08. Dielisyscentre, B. Braun Avitum Hungary pltd, Tatabánya, Hungary

Background

The results of the largest ever study in the history of science conducted to examine the near-death experiences led researchers at the University of Southampton to conclude: there is life after death.

Objectives

A 46-year-old patient, currently on dialysis. He went trough the state of clinical death twice. Diagnosis (1993): glomerulonephritis. HD started in 1996 followed by kidney transplantation graft rejection in 2004. Due to jugularis and subclavia v. puntio failure, left v. femoral catheter insertion leading to complication prior to a hemorrhagic schock eventually leading to clinical death followed by successful resuscitation.

During immediate abdominal surgery, polytransfusion, retroperitoneal hematoma evacution, successful resuscitation anew. In the course of post-operation recovery recurring bleeding, tamponade re-op. Pneumonia, fever, in 10 days reop., drenage. HD until 2008, in the same year, transplantation of the right kidney. Due to insufficient graft function HD in 2016 anew.

Results

The patient experienced a state of clinical death twice. On the first occasion he sensed a "milk-white" ambience. On the operating table he sensed a calm and warm corridor while his pain was totally alleviated.

Conclusion/Application to practice

Since the events took place his life has drammatically changed. Love and care for his family are now his main impetus in life. Currently, he is employed by a firm as a senior manager. He is concentrating on the present, like "everyone else", and 3 times a week he undergoes dialysis treatment.

Disclosure: No conflict of interest declared

E-P 068

Involvement of the family and caregiver as a priority in haemodialysis

J.L. Ferreira de Jesus[1], A.I. Rodríguez Cejudo[1]

[1]León Dialysis Centre, Fresenius Medical Care, Leon, Spain

Background

Haemodialysis patients need the support of the family or caregivers to improve their quality of life. In our dialysis centre, we have implemented a programme with several activities to involve the family or caregivers in the haemodialysis treatment.

Objectives

To explore the families' or caregivers' opinion about our practice of care for their relatives.

Methods

During the last two years, we have developed several activities in our centre to make the patients' families or caregivers feel integrated not only in the treatment of haemodialysis, but also in the daily life at the dialysis centre.

Therefore, we have prepared a variety of common activities, for example: Open house day, Christmas' party, patients' day, educational discussions, a physical exercise programme, a photography exhibition and a vivid communication during the first and regular follow-up meetings.

We asked the families and caregivers about their opinion on our clinic activities by means of questionnaires. We undertook a survey using yes/no questions, e. g. "Do you feel integrated in the treatment of your relative?" We obtained replies from 35 families and caregivers.

Results

The results of the surveys show that the family and caregivers find this integration into the centre's activities very good and stated that their confidence in the team has increased significantly.

Conclusion/Application to practice

Thanks to the success of this kind of initiatives, this model could be applied to other centres in future.

Disclosure: No conflict of interest declared

E-P 069

Redesigning workflows to optimize benefits: Needling during priming

C. Miriunis[1], M.T. Parisotto[1], F. Pelliccia[1]

[1]Care Value Management, Fresenius Medical Care, Bad Homburg, Germany

Background

There are a number of models and strategies for the alignment of workflow processes and quality testing. Although the characteristics of these methods might differ, they have a common core idea. Testing the revised workflow before implementation can not only save time and money, and the commitment of users who would otherwise be frustrated, but also provides valuable knowledge for the redesign of other processes.

Objectives

To optimize time required during patient connection and resources used.

Methods

We evaluated whether patient assessment and needle placement were possible during priming of the extracorporeal blood circuit.

We measured the time before and after needle placement during priming and evaluate the changes in the nurse's workload.

Results

With the 'Needling While Priming' procedure, we were able to save almost 10 minutes per nurse and shift, mainly during connection procedures, i. e. from 50.04 to 40.09 minutes with a nurse/patient ratio of 1:4.

- This time saving allows nurses to optimize time for:
  - Dialysis room preparation
  - Patient assessment
  - Patient connection and disconnection

Conclusion/Application to practice

Healthcare professionals and administrators continuously seek ways to enhance patient care, while improving operational and cost efficiency. As nurses are on the frontline when it comes to patient care, improving their workflow can provide a substantial benefit for patients and shift scheduling. More efficient processes increase the time nurses can spend for patient care.

Disclosure: No conflict of interest declared

E-P 070

Idl-apheresis as a treatment of choice for patients with familial hypercholesterolemia

H. Klaric[1], Z. Lubina[1]

[1]Clinic for Internal Medicine, University Hospital Centre Zagreb, Departement of Arterial hypertension, Dialysis and Transplantatiopn, Zagreb, Croatia

Background

Familial hypercholesterolemia- is an inherited autosomal dominant disease and refers to mutation of a gene affecting low-density lipoprotein receptor (LDLR) causing defective hepatic cholesterol uptake and resulting in severe hypercholesterolaemia from birth.

Objectives

Patients that are homozygous for familial hypercholesterolemia (HoFH) exhibit severe LDL hypercholesterolemia (16,8-25,9 mmol/l), cutaneous and tendon xanthomas, premature atherosclerosis beginning in childhood and atherosclerotic cardiovascular disease inadolescence. They are resistant to drug therapy.

Methods

We report a case of 17-year patient who presented with xanthomas and elevated serum cholesterol (29 mmol/l) when he was 6 months old. His parents also had hypercholesterolemia, as well as their parents. During diagnostic processing we failed to find corneal arcus and atherosclerotic plaques.Genetic testing was performed and the diagnosis of HoFH was established. We initiated dietary and statin treatment and reduced cholesterol to 23.3 mmo/L.

Results

We started with apheresis treatments in patient when he was 6 year old. Regular once-weekly apheresis for the last 10 years reduced LDL cholesterol to 7 mmol/l preapheresis and 3.3 mmol/l postapheresis. The patient had 369 apheresis procedures and remained clinically well with normal growth and significant regression of xanthomas and without progression of cardiovascular disease.

Conclusion/Application to practice

Conclusion: T reatment with LDL apheresis of patients suffering from familial hypercholesterolemia resistant to maximum conservative therapy is very effective and safe even in long-term application. With this method average reduction of LDL cholesterol and Lp is 70% for each procedure, 40-50% in long-term treatment, respectively. Early treatment can lead to substantial reduction of cardiovascular events and death in patients with HoFH.

Disclosure: No conflict of interest declared

E-P 071

Hormonal disorders caused by shift work.

A. Trzcinska[1]

[1]Medical University of Silesia, PNA, PNNA, Katowice, Poland

Background

In Poland nurses receive a small payment for their work. Nurses work in two or three locations. They are very tired. Nurses have a hormonal disorder.Shift work - fatigue are dangerous to the health of nurses and the health and lives of patients.

Objectives

We wanted to assess whether shift work is healthy.

Methods

The survey, interview, analysis of test results.

Results

Nurses have a lot of hormonal disorders caused by shift work:
sleep disorders - 65.8%
intestinal motility disorders - 42.5%
overweight (BMI 25-30) - 40%
Hypothyroidism - 32.5%
menstrual disorders - 30.8%
a feeling of fatigue - 30%
stomach ulcer - 22.5%
hypertension conditioned hormonally - 21.6%
depression - 15%
obesity (BMI> 30) - 13.4%
Hyperthyroidism - 9.6%
problems conceiving - 6.7%
diabetes - 5.9%
neurosis - 5%

Conclusion/Application to practice

Nurses who work in shift mode, have health problems. Abnormal secretion of melatonin, renin and leptin cause overweight and obesity.
85% of nurses have hormonal disorders.
Shift work and work 2 - 3 dialysis causes that these nurses often make mistakes. It is dangerous for the health of nurses and the health and lives of patients.

Disclosure: No conflict of interest declared

E-P 072

The case of a dialysis patient who gave birth to a healthy child

E. Górecka[1]

[1]DaVita Clinic Kołobrzeg, Kołobrzeg, Poland

Objectives

Planning the nursing process, which had a positive influence on the course of pregnancy as a result, the birth of a healthy baby

Methods

The following medical records were analysed: hemodialysis protocols, nursing reports, diagnostic tests results, laboratory tests results, obstetrical documentation. Special attention was paid to the process of nursing the pregnant woman, taking into account the following issues:

1. Acceptance of the hemodialysis regime of three times weekly dialysis for 3 - 3.5 hours per session. Maintaining proper bicarbonate concentration in the dialysate adjusted to the current balance of the metabolic acidosis, maintaining the proper serum potassium.
2. Prevention of anemia.
3. Prevention of hypertension.
4. Supporting the patient during emotional ups and downs.
5. Involving the patient's partner in providing emotional support for the expectant mother
6. Preparation of the home environment for the baby

Conclusion/Application to practice

On 9 March 2015, by way of caesarean section, in the 36th week of pregnancy, the patient gave birth to a boy weighing 2.560,00 grams. Adjusting her dialysis regime allowed for almost physiological pregnancy. Psychological support was offered by the nurses which helped to overcome the stress experienced by the woman throughout the pregnancy.

Disclosure: No conflict of interest declared

E-P 073

Successful treatment of a child with extracorporeal membrane oxygenation/continuous renal replacement therapy

S. Besedic[1], K. Valentak[1], J. Slavicek[1], D. Milosevic[1]

[1]Department of nephrology, dialysis and transplantation, University Clinical Hospital Centre Zagreb, Zagreb, Croatia

Background

Extracorporeal membrane oxygenation (ECMO) in a pediatric patient with acute cardiopulmonary insufficiency has high incidence (70-85%) of acute kidney injury (AKI) asociated with high mortality. We present our experience and sucessful outcome in a patient with continuous renal replacement therapy (CVVHD) and ECMO. A favourable outcome in an eight-month child in whom both procedures were performed is presented.

Methods

Shortly after initially acute viral infection a myocarditis of unknown etiology was diagnosed. The child's condition further deteriorates with cardiogenic toxic shock and multiorgan failure. After the successful resuscitation which took 120 minutes the intensive care pediatric specialists decide to applyECMO. Because of acuterenal failure and hypervolemia a CVVHD/24 hour was applied during 10 days. During that period blood flow rate was in average 50 ml/min, flow of dialysate 350 ml/h and ultrafiltration rate 10-100 ml/h. CVVHD administration *via* ECMO/6 days was performed followed by central venous catether application /4 days. Heparin 500 ij/hr (if APTV was >160s) was administerd through ECMO. Despite serious complications (hypotension, bleeding) the child made a full recovery and ECMO/CVVHD treatments ceased.

Conclusion/Application to practice

Both treatments are very complex medical procedures and requires multidisciplinary modality treatment with high level of skill and knowledge of all medical personnel. The *conditio sine qua non* for the favourable outcome requires excellent team work and communication between intensive care pediatric specialistst, critical care and dialysis nurses and perfusionists and pediatric nephrologists.

Disclosure: No conflict of interest declared

E-P 074

Cytokine absorption and continuous renal replacement therapy for septic shock and acute kidney injury

K. Körtvélyesiné Bari[1], J. Balla[1]

[1]Dialysis Centre, Fresenius Medical Care, Debrecen, Hungary

Background

Recently, Cytokine Absorption Therapy (CAT) filter has received regulatory approval for septic patients in Hungary. Technically, CAT can be combined with continuous renal replacement therapy (CRRT). Nevertheless, the practical combination of these two technologies has not yet been systematically studied and understood.

Methods

We received an emergency renal consultation request for a 5-year old girl with erysipelas that was progressing rapidly to a septic shock and Acute Kidney Injury (AKI) with massive volume-related weight gain (VRWG). She had an initial insect bite on the right lower extremity with rapidly advancing oedema and erythema proximally. Despite administration of appropriate antibiotics, she progressed to septic shock with multi-organ failure with AKI, severe VRWG and necrotic changes on the right lower extremity (RLE) within hours. She received one initial plasma exchange with fresh frozen plasma and CRRT was initiated with continuous veno-venous haemodialysis and regional citrate anticoagulation (RCA). As the clinical picture strongly suggested a bacterial toxin-mediated process, the CRRT circuit was supplemented by a CAT filter.

Results

The combined CRRT-CAT therapy with RCA was continued for the following 6 days without problems and 17.8l VRWG was removed. Blood cultures, urine, and stool remained negative. Her RLE healed and she recovered well from respiratory failure and AKI.

Conclusion/Application to practice

A timely removal of cytokines can promote recovery of patients from septic shock and VRWG.

Disclosure: No conflict of interest declared

E-P 075

Successful multidisciplinary treatment of a boy with Down and Cri du chat syndromes

S. Besedic[1] K. Valentak[1], J. Slavicek[1], D. Milosevic[1]

[1]Department of nephrology, dialysis and transplantation, University Clinical Hospital Centre Zagreb, Zagreb, Croatia

Background

Child with Sy Down and Cri du chat always demand augmnented medical care, especially in neonatal period. The combination of such diseases is very rare with few giudelines to follow.

Results

The case describes a male premature baby, BW 1860 g and APGAR score 8/10 with typical clinical phenotype of Down syndrome mixed with of cri du chat (5 p deletion syndrome) was admitted in Intensive Care Unit after operation of large ventricular septal cardiac defect and liver failure. Clinical course was complicated by multiorgan failure and haemorrhaghic shock with intestinal perforation. Concomittant pleural effusion needs pleural drainage. Renal failure require continious 24 hr renal replacement therapy during next 6 months *via* central venous catether. Blood flow was 50 ml/min, dialysate flow 300 ml/h and ultrafiltration rate up to 75 ml/h depending of patent overall condition and child's hydration. Additional complication was Heparin induced Trombocytopenia. Prolonged hosptalization and long-term dialysis caused contractures of child' hips and legs. After ceasing of hemodialysis, CAPD was introduced with few peritonitis infections as a complication.

Conclusion/Application to practice

After almost a year of treatment, the child's condition gradually improved with full recovery of renal function and overall physical condition. The child is now walking freely and pronounces simple sentences according to his primary concurrent diseases. Multidisciplinary approach of all medical personal to the treatment of such a complicaded conditions was the key of such accomplishment.

Disclosure: No conflict of interest declared

E-P 076

The importance of colon cleansing prior to peritoneal dialysis catheter placement

D. Efeyurtlu[1], D.D. Balci[1], U. Maden[1], A. Demirbas[2], U. Yilmaz[1], S. Gul[1], A. Inci[1], O. Akin[1]

[1]Peritoneal Dialysis, Antalya Education and Research Hospital, Antalya, Turkey; [2]Home Therapies, PD, Fresenius Medical Care, Antalya, Turkey

Background

A permanent and reliable peritoneal access route is essential for a successful peritoneal dialysis (PD). An ideal catheter should be bio-compatible with surrounding tissues, provide adequate fluid drainage for prolonged periods of time, and should minimize peritoneal dialysis-related complications such as bacterial migration, peritonitis, and dialysate leak.

Objectives

Constipation results from a slowing down of intestinal peristalsis or inadequacy of feces-forming material. Causes of constipation in patients with CRF include psychosomatic diseases, inadequate dialysis efficacy, poor nutrition, or physical inactivity. Constipation may prevent the drainage through bending, squeezing, or disposition of the catheter, with consequent adverse effects on PD therapy.

Methods

Tenckhoff trocar and Seldinger methods represent the most frequently utilized percutaneous catheterization techniques. Using the percutaneous technique, catheter placement is better tolerated, allowing a more rapid initiation of PD. In the routine practice, we perform colon cleansing one day before the placement of the percutaneous catheterization.

Results

However, inadequate cleansing is a frequent occurrence leading to catheter malposition. Therefore, to achieve a more complete colon emptying, we now initiate a liquid diet 3 days prior to the procedure with the use of laxative one day before it. This led to a significant reduction in the incidence of catheter malposition and drainage problems.

Disclosure: No conflict of interest declared

E-P 077

Comparison of two different dressing modalities in the prevention of outer cuff excursion

D. Efeyurtlu[1], D.D. Balci[1], U. Maden[1], A. Demirbas[2], U. Yilmaz[1], S. Gul[1], A. Inci[1], O. Akin[1]

[1]Peritoneal Dialysis, Antalya Education and Research Hospital, Antalya, Turkey; [2]Home Therapies, PD, Fresenius Medical Care, Antalya, Turkey

Background

Peritoneal dialysis (PD) offers quality of life advantages in the treatment of patients with end stage renal disease (ESRD), since, with time, patients become self-sufficient and are able to cope with potential problems arising from this procedure. Patients start receiving intensive training on catheter care from the initiation of PD. Preventive measures are of utmost importance for protection against catheter-associated infections. These include use of pre-operative antibiotics, exit site care, and local antimicrobials.

Methods

Training on the use of dressings provided by PD nurses is very important for the prevention of bacterial colonization and catheter exit site (CES) infections as well as for maintaining the patency of the catheter by minimizing the catheter exit site trauma.

Results

In this poster we present a comparison between the use of povidone iodine or chlorhexidine gluconate for the routine care in PD patients with regard to the prevention of CES infections, peritonitis, tunnel infection, hyperemia, edema, and increased temperature in the setting of outer cuff excursions. Our results have suggested a better outcome with chlorhexidine gluconate.

Disclosure: No conflict of interest declared

E-P 078

Importance and necessity of hypertension awareness programs

D. Efeyurtlu[1], D.D. Balci[1], M. Ummuhan[1], A. Demirbas[2], U. Yilmaz[3], S. Gul[3], A. Inci[3], R. Olmez[4]

[1]Peritoneal Dialysis, Antalya Education and Research Hospital, Antalya, Turkey; [2]Home Therapies, PD, Fresenius Medical Care, Antalya, Turkey; [3]Nephrology, Antalya Education and Research Hospital, Antalya, Turkey; [4]Nephrology, Karaman State Hospital, Karaman, Turkey

Background

Hypertension is a preventable cardiovascular risk factor that affects a significant proportion of adult populations worldwide. Ageing populations, rapid urbanization, increase in obesity, and high dietary sodium intake are closely associated with an increasing prevalence of hypertension, responsible for 45% and 51% of the deaths due to cardiac disease and stroke. Despite a generally low awareness, treatment, and control rates of hypertension globally, significant variability is also observed between countries. Our aim was to assess the level of knowledge on blood pressure measurement in CKD patients.

Methods

A questionnaire on hypertension measurement was completed by 211 hypertensive patients.

Results

The 211 patients were divided into stages using CKD-EPI formula as follows: Stage 1-3,59.2%; Stage 1-4,40. 4%. 65.4% declared to be informed on proper blood pressure measurement technique, while 34.6% reported no such knowledge. The sources of information for the proper blood pressure measurement technique included health personnel (44 patients), instruction manuals (30), self-teaching (28), sales representative (18), and pharmacists (18). The number of patients who reported no blood pressure monitoring, once weekly, twice weekly, thrice weekly, 4-times weekly, and on a daily basis was 36%, 19.4%, 13.3%, 8.5%, 5.2%, and 14.7% respectively.

Conclusion/Application to practice

Globally, only 50% of hypertensive individuals are aware of their condition, and of these 50% receive anti-hypertensive treatment. Among those who receive anti-hypertensive agents, blood pressure control is achieved only by 50%. According to previous hypertension prevalence studies from Turkey, the level of awareness among hypertensive patients is 54.7%, the proportion of individuals receiving anti-hypertensive treatment is 47.4%, and blood pressure control rate is 28.7%. The first step to increase blood pressure control rates should involve patient education on the importance of blood pressure measurement and monitoring.

Disclosure: No conflict of interest declared

E-P 079

Life quality of end stage renal failure patients. A study of its factors

Y. Tokem[1], F. Ok[2], E. Unsal Avdal[1], B.N. Ozgursoy Uran[1], S. Senturk[3]

[1]Faculty of Health Science, Izmir Katip Celebi University, Izmir, Turkey; [2]Nurse, Izmir Katip Celebi University Ataturk Training and Research Hospital, Izmir, Turkey; [3]Nephrology Clinic, Health Science University Tepecik Training and Research Hospital, Izmir, Turkey

Objectives

The purpose of this research planned as a descriptive study is to examine how the quality of life (QoL) and its factors affect hemodialysis and peritoneal dialysis (PD) patients.

Methods

Target population of the study are end stage renal failure patients on hemodialysis and peritoneal dialysis treatment (N=100). All data were collected from 70 patients having hemodialysis and 30 patients having PD treatment. Patient Identification Questionnaire and Kidney Disease QoL Questionnaire-Short Form were used as a data collection tool.

Results

Dialysis patients' QoL is found statistically significant ($p<.05$) in comparison to the diagnosis period of renal disease and average point of QoL; patients with a diagnosis of 6-10 years scored lower QoL points in the social support dimension compared to other groups ($p=.037$). When compared according to age groups, the cognitive function subscale and the social relations quality subscale of the 20-30 age group scores were higher than in the other groups (respectively $p=.024$, $p=.021$). In the age group 31-40, the average point of the subscale of the employment status of the patients was higher than the other age groups ($p=.047$). When analyzed by sex, the average point of the subscale of employment status of the female patients was higher ($p=.036$).

Conclusion/Application to practice

QoL of end stage renal failure patients resulted "moderate". The independent variables and affected sub-dimensions in the findings of care and treatment applications should be considered in the care plan.

Disclosure: No conflict of interest declared

E-P 080

Which nurses have more work related stress: hemodialysis or peritoneal dialysis nurses?

A. Karakoc[1], M. Yilmaz[2], N. Alcalar[3], H. Kayabasi[1], B. Esen[4], N. Gorgulu[1], D. Sit[5]

[1]Dialysis Unit, Bagcilar Training and Research Hospital, İstanbul, Turkey; [2]Nephrology Department, Bakirköy Dr Sadi Konuk Training and Research Hospital, İstanbul, Turkey; [3]Psychiatry Department, İstanbul University İstanbul Medical Faculty, İstanbul, Turkey; [4]Nephrology Department, Acıbadem Taksim Hospital, İstanbul, Turkey; [5]Nephrology Department, Kemerburgaz University Medical Faculty, İstanbul, Turkey

Objectives

Workload, patient responsibility, providing health care for severe .and fatal disease, provide emotional support to the patient and his / her relatives when necessary causes stress and tension who works in the health industry.
This study was planned to identify the factors that causing stress .and compare the work-related tension to conditions between hemodialysis (HD) and peritoneal dialysis (PD) nurses.

Methods

224 dialysis nurses (209 women, 15 men) working in public and university hospitals participated in the observational, multicenter study. Socio-Demographic Information Form and Job-Related Tension Scale including descriptive characteristics of nurses were used to collect data.
A total of 224 dialysis nurses (143 HD and 81 PD nurses) participated in the study.
Work-related stress score was significantly higher in HD nurses is 37.97 ± 6.7 ($p = 0.007$). Gender, health problem, weekly study period, job satisfaction at the university, administrative were different support, participation in vocational training affected job-related tension scores. In contrast, there was no difference in age, marital status, having a child, education level, career duration, hobbies, work shift, participation in social activities, sleep quality and work-related stress scores.

Results

In this study, work-related tension is found in dialysis nurses, especially in HD nurses, and is influenced by various factors. It is assumed that dialysis nurses will be an intermediary in taking institutional and individual measures to reduce work-related tension by determining work-related tension levels and the factors affecting them.

Disclosure: No conflict of interest declared

E-P 081

Comparıson of physical condıtıons and job assosıated tensıon between hemodıalysıs and peritoneal dialysis nurses

A. Karakoc[1], M. Yilmaz[2], N. Alcalar[3], H. Kayabasi[1], B. Esen[4], N. Gorgulu[1], D. Sit[5]

[1]Dialysis Unit, Bagcilar Training and Research Hospital, İstanbul, Turkey; [2]Nephrology Department, Bakirkoy Dr Sadi Konuk Training and Research Hospital, İstanbul, Turkey; [3]Psychiatry Department, İstanbul University istanbul Medical Faculty, İstanbul, Turkey; [4]Nephrology Department, Acibadem Taksim Hospital, Istanbul, Turkey; [5]Nephrology Department, Kemerburgaz University Medical Faculty, İstanbul, Turkey

Objectives

Job satisfaction is one of the key issue for people to be successful, happy and productive. However work associated tension is seen in health-care workers for many reasons.

İn this study we aimed to identify and compare various demographic characteristics and working conditions of hemodialysis (HD) and peritoneal dialysis (PD) nurses to find out how job satisfaction and work associated tension affects staff.

Methods

A total of 224 dialysis nurses (209 women, 15 men), including 143 HD and 81 PD nurses, participated in the study. In order to collect data, Socio-Demographic Information Form containing the descriptive characteristics and job conditions of the nurses and Minnesota Job Satisfaction and Work Related Tension Scales were used. Only Marital Status was statisticaly significant among social demographic findings (p=0,004). 93.8% of PD nurses and 68.5% of HD nurses participated in training programme (p = 0.001). Participation in social activities in HD Nurse are greater than PD Nurses (81.9% versus 67.9%, p = 0.025). The work-related tension score was significantly higher in HD nurses (37.97 ± 6.7) (p = 0.007). Job satisfaction was also significantly lower in HD nurses (67.27 ± 13.54) than PD nurses (72.33 ± 12.25) (p = 0.003). Job satisfaction was moderate in the HD nurses (66.2%) and high in the PD nurses (48.1%) (p = 0.033).

Results

As a result, high work-related tension could lead to lower job satisfaction. İncreased participation in training programs, could have additive effect on job satisfaction.

Disclosure: No conflict of interest declared

E-P 082

Case study of peritoneal dialysis in a diabetes patient with severe MRSA septicaemia

A. Jakab[1], Z. Kisvarga[1], M. Bőke[1]

[1]Dialysis Centre, Fresenius Medical Care, Vác, Hungary

Background

According to scientific literature, there is no consistent evidence which treatment modality is most suitable for an ESRD patient, and careful individual modality choice should be used. Changing to haemodialysis is very common in septic patients treated by continuous ambulatory peritoneal dialysis (CAPD), when the patient's condition deteriorates. This decision is usually characterised by concerns regarding of inadequate fluid control and complications.

Objectives

To prove the unnecessity of modality change to haemodialysis in the present of relative contraindication of CAPD treatment, such as serious prolonged septic condition.

Methods

In our case study, we report an event of a 32 years old patient with severe septicaemia as a consequence of a lower limb MRSA infection, focusing on problems and tasks related to continuation of CAPD treatment.

Results

In the presented case, it was not necessary to interrupt CAPD as a part of complex causal and supportive therapy. We achieved a satisfactory fluid and metabolic control by continuing peritoneal dialysis and did not observe any complications related to the peritoneal dialysis modality. The patient has recovered from her septic illness.

Conclusion/Application to practice

Although general findings cannot be concluded due to the unique nature of the case, we can claim that CAPD treatment in septic patients is not necessarily unsuccessful even if predisposing factors (e.g. diabetes) are present. In this patients, continuation of CAPD can be a reasonable alternative to a modality change in case of a previously adequate peritoneal function and fluid balance.

Disclosure: No conflict of interest declared

E-P 083

Changes in body weight and overhydration in patients after starting peritoneal dialysis

N. Hrdan[1], R. Mateljić[1], N. Bednjanec[2]

[1]Division of Nefrology, University Hospital Merkur, Zagreb, Croatia; [2]Kirkomerc d.o.o, Zagreb, Croatia

Background

Peritoneal dialysis is characterized by weight a gain. Overhydration is a common problem in peritoneal dialysis patients. Overhydration and inadequate nutritional status of PD patients are linked to increased morbidity and mortality.

Objectives

To determine changes in body weight and hypervolemia in the first year of peritoneal dialysis treatment.

Methods

Retrospective research was conducted in the Division of Nefrology, University Hospital Merkur. Body weight and bioimpedance spectroscopy measurement were performed in the moment of peritoneal dialysis initiation, after 6 months and 12 months after PD.

Results

We evaluated 11 patients (four females, median age 46).

In the moment of start peritoneal dialysis the mean body weight was 81.77±20.03 kg, prevalence of obesity was 54%, and the mean BMI was 26.59±4.92.

After one year within the start of PD, weight gain occurred in 7 patients, while 2 patients experienced a decline in body weight. The median weight change after one year of PD was 3.3 kg.

LTI has not changed over a year of PD (14.57±3.23 vs. 14.7±2.89; p=0,97), neither did FTI (12.03±5.69, vs.11.1±4.15; p=0,91).

All of the patients at the start of the PD treatment had preserved residual function, the mean 2.18 ±0.77 L. After a 12 months residual function above 1500ml was present in 9 patients, additionally 1 patient was anuric. Hydration status was stable over the follow-up period (2.13 ±1.65 L vs. 2.5±1.79 L; p=0,84).

Conclusion/Application to practice

After a year of monitoring no statistical significant difference has been noticed in the increase of body weight and overhydration.

Disclosure: No conflict of interest declared

E-P 084

Assisted PD for a blind, type 1 diabetes patient with insulin pump. Case report

O. Vágner[1], M. Molnár[1]

[1]Dialysis Centre, Fresenius Medical Care, Szigetvár, Hungary

Background

In our dialysis centre, we have 2 peritoneal dialysis (PD) patients with type 1 diabetes mellitus under continuous subcutaneous insulin infusion (CSII) therapy.

Objectives

We present the case of a 37-year old male patient suffering from type 1 diabetes since 1991.

Methods

The patient was initially treated with human insulin and subsequently with insulin analogues according to the intensified
insulin therapy regimen. Due to higher glycaemic markers and marked fluctuations in the blood glucose values, CSII therapy was initiated in 2010. In 2008, the patient went blind. Proteinuria was also diagnosed at the same time initiating regular
nephrological check-ups. With the deterioration of his renal function, we started to prepare our patient for renal replacement therapy; he chose PD modality due to his active lifestyle.

Results

A Tenckhoff catheter was implanted in October 2015. The assisted PD treatments are conducted by the patient's mother due his loss of eyesight. After the PD treatments, the patient's glycaemic control appears optimal; furthermore, his status on the simultaneous pancreas-kidney transplantation waiting list is currently active.

Conclusion/Application to practice

Despite his illness, the patient is able to maintain his active lifestyle.

Disclosure: No conflict of interest declared

E-P 085

Crystal's soul, something to remember me by

M. Ramirez-Pereira[1]

[1]Nursing Department, University of Chile, Santiago, Chile

Background

Chile has one of the highest Gini index within the countries members of the Organization for Economic Cooperation and Development, reaching 0.5 points (OCDE, 2015). Inequality can be found in all areas of everyday life; however, we as Chileans are more sensitive to those aspects of inequality which are related to health and education

The document rescues the silenced voice of the teenager, the muted voice of the nurse and the muted voice of families.

Objectives

To rescue the voice of patients, nurses and family.

To analyze from a critical perspective, Chilean public health and social inequity, with a system that is a legacy of the dictatorship

Methods

This is a qualitative inquiry known as interpretative autoethnography (Denzin, 2014). Eduardo's story, a teenager with acute renal damage, hospitalized in Intensive Care Unit at public hospital in Chile.

Results

Public policies imposed under authoritarianism in Chile include the economic model, the constitution, health and education. Quantitative data show a high-income country with USD 20,000 per capita. However, the Gini Index reveals strong inequality. In this story, we observe in a real situation: a young person with renal damage in an intensive care unit, marked with a neoliberal vision of reality, and how this affects the quality of health care and how humanized care is forgotten.

Conclusion/Application to practice

Nursing Care is humanistic and the interpretative autoethnography is a posibility to challenge traditional health research in Latin America and the world: aseptic, neutral and objective, with a superior position of the researcher in relation to the person under investigation. In this kind of research, the nurse is a human being, who feels and suffers.

E-P 086

Influence of autonomy motivation on self-management behavior and recognition in dialysis patients.

K. Yamamoto[1], A. Okumiya[2]

[1]Faculty of Nursing, Yokohama Soei University, Yokohama, Kanagawa, Japan; [2]Faculty of Medical Sciences Department of Nursing, Teikyo University of Science, Tokyo, Japan

Background

Autonomous motivation in self-determination theory is known to encourage self-management behavior through the feeling of competence. In each person, however, there is a mixture of various motivations. This points to a need for examination that is not confined to autonomous motivation but also embraces controlled motivation.

Objectives

The purpose of this study is to clarify the nature of the influence exerted by the state of dialysis patient's motivation on management behavior, coping strategy and the quality of life.

Methods

Anonymous, self-administered questionnaires by treatment self-regulation questionnaire (TSRQ), the Stress and Coping Inventory (SCI) and the kidney disease quality of life (KDQOL) were obtained from 250 patients in Japan who were on dialysis regularly.

Results

In the group with a high degree of autonomous motivation and low degree of controlled motivation, there was little increase in weight (the management status was favorable) ($F=3.758$, $p=0.011$). In addition, this group was characterized by a long dialysis history ($F=4.679$, $p=0.003$), use of diverse methods for coping ($F=5.509$, $p=0.001$), high degree of “mental health” ($F=4.201$, $p=0.006$), and high degree of “patient satisfaction” with care ($F=3.564$, $p=0.015$).

Conclusion/Application to practice

Patient cognition of self-management motivation with a good balance between a high degree of the autonomous type and low degree of the controlled type, is linked to favorable self-management behavior and a better quality of life. There is a need for nursing to support autonomy and internalize self-management so patients can obtain good motivation.

Disclosure: No conflict of interest declared

E-P 087

The importance of social counselling in improving the social status of a patient on dialysis

I. Hlaváčková[1]

[1]Dialysis unit, B. Braun Avitum s.r.o, Partizanske, Slovakia

Background

Dialysis treatment is associated with somatic changes and negative emotions. These impact on interpersonal relationships which can result in social isolation, disruption of family relationships, change of the social status.
The treatment for chronic renal disease can inhibit people in their common social which affects their sense of self-esteem and value. In most people, self-esteem and self-value links to how independent, useful and desireable one feels.

Objectives

To find a balance in the patient's life with the result that they can cope with their illness and treatment in a more healthy way.

Methods

The social consequences associated with this illness can be reduced, minimized or eliminated with the use of suitable measures. If patients feel they are unable to engage in social activities, it is necessary to replace them with other activities or hobbies. Such social rehabilitation applies not only to the patient, but also to his/her environment, family and social environment.

Conclusion/Application to practice

The social care coordinator in our dialysis centre provides counselling on social care. Through appropriate education, communication and looking at various possiblities, the social care coordinator assists the patient to integrate more fully in their social life.

The coordinator is actively involved in organizing social, cultural and sporting events for patients and their families which results in a healthier lifestyle, reflected in their social engagement, enhansed self-esteem and value.

Disclosure: No conflict of interest declared

E-P 088

Poverty from the perspective of a patient on dialysis

M. Vnučáková[1]

[1]Dialysis unit, B. Braun Avitum s.r.o., Trstená, Slovakia

Background

The paper describes poverty as a social phenomenon in terms of health. It presents the results of a study on poverty from the perspective of the patients treated with dialysis.

Objectives

Poverty presents a problem not only for individuals; but presents also an economic, social, cultural, political, ethical and health problem. The aim of our study was to analyse poverty and recognise its forms, causes and consequences. Subsequently, we looked at possible solutions and elimination of its impacts within a holistic approach to the care of our patients.

Methods

The quantitative survey was performed using the questionnaire method. For the experimental part of the study we used empirical research (quantitative methodology).

Results

The study was conducted in the Dialysis Centre B. Braun Avitum Ltd. Trstena in November 2016. The study sample included 34 respondents.

Respondents

Income and expenditure balance is important for the household budget. In the case of our respondents, the highest proportion of income constitutes the pension. The risk of poverty in terms of income appears to be greater in women than in men; we call the trend feminisation of poverty. Individual risk group represent people who live alone. The transition from normal health status to dialysis treatment in economically active patients has a major financial burden for the patients and his family.

Conclusion/Application to practice

In this study, we aim to describe how the dialysis patients perceive poverty. The findings of our study refer to several possible areas of assistance:

• working with the elderly, family, with lone individuals; education and awareness.

Disclosure: No conflict of interest declared

E-P 089

Utility scores to assess quality of life in prevalent haemodialysis patients

E. Holvoet[1], I. Van Dorpe[1], E. Deman[1], A. Verleysen[1], S. Eloot[1], W. Van Biesen[1]
[1]Nephrology, Ghent University Hospital, Gent, Belgium

Background

Quality of Life (QoL) is important for evaluation of health care quality in patients with chronic illnesses. However, a true estimation of QoL can be cumbersome. EuroQol 5D (EQ5D) allows calculating quality adjusted life years, and Patient Reported Outcomes Measurements Information System (PROMIS) provides scores that can be compared to different reference populations. We assessed EQ5D and PROMIS-29 in haemodialysis (HD) patients.

Methods

HD patients of different settings were interviewed by trained nurses questioning EQ5D and PROMIS-29, and overall health and QoL during the previous week. Scores were calculated using the provided software.

Results

A total of 121 patients (74 males, age 68±16) were interviewed. In EQ5D, utility index (range 0-1) was 0.44±0.26 and overall health was 61±16 on a scale 0-100. Overall health and QoL (range 1-7) were assessed as 4.6±1.3 and 4.8±1.4 respectively. In PROMIS, HD patients scored poor for physical function (39±12) and fatigue (39±12) (mean general population scores 50), slightly lower than general population for sleep quality (48±9) and social roles (46±11) and normal for anxiety (50±10) and depression (51±10), all in concordance with the results of EQ5D domains. The EQ5D utility index however correlated poorly with the 2 subjective scores (R=0.08 and 0.12, both p=NS), and only with 'physical function' of the PROMIS domains (R=0.28, $p<0.01$).

Conclusion/Application to practice

In this cohort of haemodialysis patients, reported EQ5D utility was low and did not correlate with the subjective scores. PROMIS and EQ5D both showed physical function and mobility were problematic, whereas anxiety and depression were comparable to the general population.

Disclosure: No conflict of interest declared

E-P 090

Detailed monitoring of arterio-venous fistula

M. Gardošová[1]

[1]Dialysis unit, B. Braun Avitum s.r.o., Pezinok, Slovakia

Objectives

The aim of the paper is to highlight the importance of the physician to nurse to patient and the nurse to nurse cooperation.

Methods

The paper focuses on the detailed monitoring of mostly complicated AVFs by the means of written observations, detailed photographs and drawings, allowing us to select the optimal as well as the easiest way of AVF cannulation for nurses and patients.

Results

It highlights the importance of procedure planning and eliminates random processes. It requires excellent cooperation between the physician, nurses and the patient, which was achieved in our case. Excellent cooperation resulted in a long-term well-implanted AVF.

Conclusion/Application to practice

This method of detailed monitoring of AVF with very good outcomes has been used at our clinic for about two years now.

Disclosure: No conflict of interest declared

E-P 091

Button hole after eight years

R. Bayerová[1]

[1]Dialysis unit, B. Braun Austerlitz s.r.o., Slavkov u Brna, Czech Republic

Background

Button Hole technique is one of the methods for arteriovenous fistula puncture (AVF).It was performed in a female patient M. G., who has been dialyzed since September 2007. At that time, no one in centre had an idea about existence of a Button Hole method, and therefore, we chose AVF puncture using the gradual needle introducing method. In the next two years, we heard about the Button Hole method in our centre. First information was brought by the head physician from a medical congress. Why should not we try it? One of the suitable patients for this method was Mrs. M. G., who started to develop aneurysms in the fistula. In cooperation with the head nurse, we successfully created her button holes (in April 2009).

Objectives

To present our longest functional button hole method.

Results

Over eight years, there was only one complication reported, associated with the button hole, which was an infection (in November 2014). The infection was treated with antibiotics (broad-spectrum antibiotics in tablets and local therapy with FRAMYKOIN oint.) and it was cured completely. During the infection, we punctured the needles outside the button hole area. The therapy lasted for 14 days. Following the treatment, we have started to use holes, which we still use today.

Conclusion/Application to practice

I have only positive experience with the Button Hole method. It has far fewer complications, such as aneurysms, stenosis, thrombosis or AVF infection.
The reward to me are particularly happy patients with "pretty shunt arms."

Disclosure: No conflict of interest declared

E-P 092

Haemodialysis parameters and neuromuscular electrostimulation in radiocephalic fistula: A single center experience

P. Estruga[1], S. Rubio[1], L. Martínez[1], V. Esteve[1], Y. Fernández[1], M. Ramírez de Arellano[1]
[1]Hemodialysis, Consorci Sanitari de Terrassa, Terrassa, Spain

Background

Radio-cephalic fistula (RCAVF) is the gold standard vascular access for end-stage chronic kidney disease patients. No data regarding neuromuscular electrostimulation (NMES) in RAVF maturation and the effect on haemodialysis (HD) sessions have been described.

Objectives

To analyse the effect of RCAVF previously matured with a NMES programme on HD treatment parameters and AVF complications.

Methods

An 8 weeks single-center prospective study in RCAVF previously matured with a NMES programme. HD parameters: blood flow (Qb), dialysate flow rate (Qd), venous pressure (PV), total litres depurated (TLD), and adequacy of HD dose (sKt/V) as well as medical or surgical complications related to RCAVF were analysed.

Results

11 patients. 82% men. Mean age 65.4 ± 19.2 years. 82% RCAVF left sided. Mean Charlson Index: 8.7 ± 3.9. 36% DM. An increase ($p^*<0.05$) in Qb* (243.5 ± 20.6 vs 313.1 ± 41.9 ml/min); PV* (145.4 ± 21.7 vs 171.6 ± 21.6 mmHg), TLD* (53.9 ± 6.2 vs 72.6 ± 11.7 litres) and sKt/V (1.45 ± 0.1 vs 1.54 ± 0.1) was observed at the end of the study. Main RCAVF complications: haematoma (27.3%), needle puncture cannulation disorders (36.4%), proximal reanastomosis (18.2%). However, no relevant changes in other HD adequacy parameters were observed.

Conclusion/Application to practice

Effective HD parameters could be achieved after 8 weeks RCAVF formerly matured with a NMES programme. These results reinforce the role of NMES programme in the short-term follow up RCAVF maturation process. Nevertheless, further studies are required to confirm the effect of NMES in these patients.

Disclosure: No conflict of interest declared

E-P 093

Evaluation of self-care behaviours in haemodialysis patients with arteriovenous fistula

T. Magalhães[1], A.P. Martins[1], C. Santos-Cunha[1], C. Cunha[1], M. Cunha[1], M. Fonseca[1], J. Pinheiro[1, 2], J. Fazendeiro Matos[3], M.T. Parisotto[4]

[1]NephroCare Fafe, Fresenius Medical Care, Fafe, Portugal; [2]Health Science Institute, Portuguese Catholic University, Porto, Portugal; [3]NephroCare Portugal, Fresenius Medical Care, Porto, Portugal; [4]Care Value Management, Fresenius Medical Care, Bad Homburg, Germany

Background

Vascular Access (VA) is essential for haemodialysis but also a key cost for the economic resources, hospitalisations and morbidity, accounting for 25% of all hospitalisations in the first year of treatment and 11% in subsequent years.

The theory of self-care was built on the prerequisite that a person must perform for himself or perform basic human body regulation activities to maintain human life and function. Self-care is considered by Orem (2001) as the behaviour performed by the person intentionally for the maintenance of health and well-being.

Objectives

- Conduct a descriptive analysis of self-care behaviours of patients with arteriovenous fistula (AVF).
- Establish potential correlations between self-care behaviours of patients participating in a systematic education programme, and patients who are not in this programme.

Methods

63 CKD patients undergoing haemodialysis were included in this quantitative, descriptive and correlational study. Mean age was 62 years and dialysis history was 58.5 months. The Self-Care Behaviour Rating Scale with AVF in Haemodialysis (ASBHD-AVF) was used for data collection.

Results

Study group's ASBHD-AVF scores are higher than control group scores'. These differences are statistically significant which means that self-care behaviours with AVF in haemodialysis are better in patients who participate in a systematic education programme.

Conclusion/Application to practice

Our patients benefited from the education programme with better self-care behaviours. This may improve vascular access outcomes and patients' satisfaction. It is most likely associated with few complications and increases patient's self-esteem, independence, self-responsibility, treatment compliance and quality of life. The patient must be considered as a self-care agent.

Disclosure: No conflict of interest declared

E-P 094

Identification of factors influencing central venous catheter outcomes

M.T. Parisotto[1], **C. Miriunis**[1], **F. Pelliccia**[1]

[1]Care Value Management, Fresebius Medical Care, Bad Homburg, Germany

Background

Haemodialysis patients with central venous catheters (CVC) have a high access infection risk. CVC infection and failure risks must be determined by analysing the individual influencing factors.

Objectives

To identify factors that may influence CVC failures and/or infections

Methods

We performed a retrospective analysis of database entries from 2014-2016 about influencing factors on CVC failure and CVC infection.

We classified gender, age, renal replacement therapy (RRT) history, exit-site care frequency and dressing type into different categories and reference groups (RefG) and estimated hazard ratios (HR) for CVC infection and failure in the different categories and RefG (Statistics: Wald test).

Results

Data were collected for 7,029 patients with tunneled CVC (average age: 64.93±15.06 years, 50.16% females). A significantly ($p<0.001$) lower relative risk for CVC outcome failure and infection was found in:

- females as compared to males [HR=0.8 for both outcomes; CI 95%, p=0.725-0.882]
- patients older than 75 years as compared to 50-65 years old [HR=0.772 for both outcomes; CI 95%, p=0.673-0.886]. (Other age groups did not show any significantly different risks.)
- weekly exit-site care as compared to exit-site care at every treatment [HR=0.697 for both outcomes; CI 95%, p=0.601-0.809].

Conclusion/Application to practice

Factors such as female gender, age >75 years, weekly exit-site care, exhibited a significantly lower relative risks for both CVC failure and CVC infection as compared to the respective RefG. Worse outcomes in men could possibly be caused by gender differences in terms of hygienic behaviour or different willingness to learn. Therefore, nurses should focus on patient education.

Disclosure: No conflict of interest declared

E-P 095

Vascular access survey in a hemodialysis center

M. Silva[1], A. Marçalo[1], A. Silva[1]
[1]Hemodialysis, Diaverum, Aveiro, Portugal

Background

The success of hemodialysis is directly related to the maintenance of vascular access. Arteriovenous fistula (AVF) is considered the vascular access with the lower rate of complications in a long term.

Objectives

Demonstrate that the vascular access monitoring program increases the survival of these patients

Methods

Quantitative, cross-sectional and retrospective study to evaluate the patency of vascular accesses and to relate it to the type of access, age, sex, time in treatment and the presence of diabetes mellitus. Data collection was performed from January 1, 2011, to December 31, 2016.

Results

During 2016, a total of 100 patients were referred 227 times for avaliation and 208 interventions occurred. The urgent interventions were in total AVF and arteriovenous prostheses (AVP) thrombectomies. In relation to the planned interventions, the most notable were the construction of new access (20%), reanastomosisvein transposition (11%) and others to solve problems detected in access (69%), including re anastomosis, angioplasty, debt reductions, among others. From the pool of patients who underwent an intervention (n=69), 19 have a radio-cephalic AVF, 13 an basilic AVF, 18 merocephalic AVF, 5 have an AVP and 14 patients had tunneling catheter due to the failure of the autologous accesses and the impossibility of building new access.

Conclusion/Application to practice

With this study, we can conclude that effective monitoring and consequent early diagnosis of complications in vascular access, allows a timely intervention and an increase in access survival.

Disclosure: No conflict of interest declared

E-P 096

The preventive and proactive nursing role in the prevention of arteriovenous grafts complications

R. Sousa[1], P. Goncalves[1], J. Melo[1], S. Campos[1], A. Silva[1], R. Peralta[2], J. Fazendeiro Matos[2], M.T. Parisotto[3]

[1]NephroCare Viseu, Fresenius Medical Care, Viseu, Portugal; [2]NephroCare Portugal, Fresenius Medical Care, Porto, Portugal; [3]Care Value Management, Fresenius Medical Care, Bad Homburg, Germany

Background

Nurses play a major role in vascular access care. Careful inspection and monitoring of vascular access is of paramount importance for the early detection of vascular-site related infections and patency issues. Thrombosis accounts for approximately 80% of arteriovenous graft (AVG) failures.

Objectives

To demonstrate the importance of nurses' vigilance in the detection of AVG complications.

Methods

We conducted a longitudinal quantitative, retrospective, descriptive study involving patients with AVG in our clinic between 2011 and 2016. We decided to cannulate AVGs with 16G needles instead of 15G to reduce damage within the graft and shear stress flow.

Results

In the last five years we had 19 patients with AVG as vascular access. 58% of the patients were female, 63% were non-diabetics. The mean age was 61 years and the average AVG patency was 50 months. We conducted more than 150 vascular access flow (Qa) evaluations per year and identified 28 stenosis requiring angioplasty, with a mean of 1.5 angioplasties/patient/year. Stenosis most frequently occurred in the central veins and venous anastomoses. We observed 6 thrombosed AVGs during follow-up.

Conclusion/Application to practice

We believe that the success of clinical monitoring in the detection of stenosis is highly dependent on the proficiency of the healthcare team and the consistency of the AVG monitoring programme.

Disclosure: No conflict of interest declared

E-P 097

The buttonhole technique in an immunosuppressed patient - A case report

F. Gerhák[1], S. Keresztesi[1]

[1]Dialysis Centre, Fresenius Medical Care, Kecskemét, Hungary

Background

In our hemodialysis centre, right cannulation technique of AVF is based suitable technique for patient at the right time for use.

Methods

We prefer the buttonhole technique for every new AVF to reduce the patient's fear. As compared to other techniques, it causes less pain and may reduce complications. A 24 years old patient was diagnosed with hypertension several years ago. He stopped taking his medicine after two months, because he thought that his blood pressure has returned to normal. In April 2016, he was hospitalised due to therapy-resistant pneumonia. His blood results showed creatinine level of 1,200 µmol/l, anaemia, oliguria, subsequent oedema, and haemoptysis. We started hemodialysis through an acute catheter and transferred him to another hospital with suspected vasculitis. He received immunosuppressive therapy. In June, his AVF was created. After the appropriate period of maturation, we applied the buttonhole technique. Both nurses and patient strictly adhered to all hygiene rules and nurses performed cannulation technique in accordance with the protocol. In December, the puncture site of the arterial side became sensitive without any signs of redness and complications. After a few days, the puncture site became hyperaemic and an abscess formed. The patient was admitted due to signs of inflammation. The abscess ruptured spontaneously requiring surgery.

Conclusion/Application to practice

Upon selection of the appropriate cannulation technique, we should consider all medical treatments. An early detection of possible complications is important as well as rapid intervention. Immunosuppression can cause infections even in case of high-level care and observance of all the hygiene rules.

Disclosure: No conflict of interest declared

E-P 098

Severing of haemodialysis catheter lumens by a patient outside the dialysis unit

A. Unal[1], E.E. Cicek[1], N. Bayraktar[2], A.M. Sarıkaya[1], M. Cetın[2], E. Bulbul[3], C. Sayan[4]

[1]Haemodialysis Clinic, Antalya Training and Research Hospital, Antalya, Turkey; [2]Interventional radiology Clinic, Antalya Training and Research Hospital, Antalya, Turkey; [3]Faculty of Health Sciences, Bezmialem Vakif University, Istanbul, Turkey; [4]Dialysis Department, Bezmialem Vakif University, Istanbul, Turkey

Objectives

Even though healthcare professionals are responsible for the application and maintenance of haemodialysis (HD) catheters, properly instructing patients and their relatives, and reminding their responsibilities subsequent to the dialysis session are of paramount importance.

Methods

A HD patient of Antalya Training and Research Hospital, age 80, had severed the catheter lumens after failing to unfasten the catheter bandage at around 22:00 on the following day after a dialysis session. When bleeding commenced from the severed catheter lumens, the patient got scared and called the 112 Emergency Hotline. The responding emergency healthcare squad sealed the catheter clamps and brought the patient to the emergency department of our hospital. The catheter was then reinstated, restoring permanent vascular access for HD treatment.

Results

Vascular access is essential to HD treatment of patients with chronic kidney disease. Establishing patient-specific vascular access and maintaining thereof are the duties of healthcare professionals. However, the responsibility of preserving the catheter lays on the patient and her/his relatives, which means that they should be instructed accordingly. Instructions given during and following each dialysis session by HD nurses/technicians accentuate the function and importance of catheters. Prevention of damage to vascular access improves survival rates and reduces the risk of life-threatening injuries. Adjustment to treatment alleviates anxiety and raises dialysis quality, thereby increasing quality of life. HD nurses and technicians should be aware that their responsibilities do not end with dialysis treatment of a patient, but extend to being instructors as well.

Disclosure: No conflict of interest declared

E-P 099

Fistula failure, late complication of central line

K. Zolyomi[1], T. Szabo[1]

[1]Dialysis Center #14, B. Braun Avitum Hungary Dialysis Network, Kistarcsa, Hungary

Background

A patent and well maintained AV fistula with optimal bloodflow is essential for the chronic hemodialysis treatment of an end stage renal disease (ESRD) patient.

Objectives

We present the case of a 54 year-old male patient with a long standing history of insulin dependant diabetes mellitus who has developed ESRD in March 2014 and started on peritoneal dialysis modality at another dialysis center.

Methods

After few months on dialysis he had a stroke with left side hemiparesis. PD was continued till February 2015. The patient was admitted to ICU due to severe pneumonia requiring respiration. It was decided to transferehim to hemodialysis and a cubital AV fistula on the non-dominant paretic left arm was created. More than a year later swelling of the arm was noted and Duplex US showed good flow at the anastomosis and thrombosis of the cephalic vein. The thrombus has resolved on anticoagulant therapy but the swelling was slowly increasing further over time. Fistulography was then performed and a complete occlusion of the left subclavian vein with number of collaterals in the shoulder area was diagnosed. Percutan angioplasty was attempted unsuccessfully and finally the fistula had to be ligated.

Conclusion/Application to practice

Retrospective review of previous charts revealed, that in 2014 a central venous line was used in neurology ICU while the patient was treated for his stroke. This was the cause for the later occlusion of the subclavian vein. Knowledge of this information may have prevented creation of left sided fistula resulting in such complications.

Disclosure: No conflict of interest declared

E-P 100

Chlorhexidine allergy among haemodialysis patients

R. Hais[1], **V. Sura Zaslavski**[1]
[1]Dialysis, Assuta hospital, Haifa, Israel

Background

Chlorhexidine often used as a skin disinfectant before arteriovenous (AV) cannulation. The precise incidence of chlorhexidine hypersensitivity and associated morbidity and mortality remain unknown. Some findings show that the rate may be as high as 2%.
In our case, the patient suffered for a significant period of time from redness, swelling and itching of the AV fistula hand. Numerous treatment attempts were ineffective, until an idea of allergy to chlorhexidine was considered and later verified, as the replacement of chlorhexidine with a different disinfectant ceased the allergic reaction.

Objectives

Relevant and up to date literature was reviewed and analyzed in order to receive a comprehensive picture of this phenomenon. Our focus was on gathering information about the history, etiology, epidemiology, presentation, diagnosis methods and appropriate intervention.
The incident that occured in our unit, was analyzed and a case report was conducted and presented, based on the available literature information.
This condition may be difficult to recognize, and we bring this case study to help increase awareness of hypersensitivity to chlorhexidine in our unit and on the global scale.

Conclusion/Application to practice

Despite its superior antimicrobial properties, chlorhexidine is a potentially allergenic substance. Hypersensitivity is relatively rare and may appear as contact dermatitis and up to anaphylactic shock and mortality. Knowledge and awareness of the nephrology staff is essential for the right diagnosis and treatment.

Disclosure: No conflict of interest declared

E-P 101

Continuity of care in hospitalized hemodialysis patients

S. Badin[1], R. Geron[1]

[1]Hemodialysis, Medical Center of the Galilee, Nahariya, Israel

Background

Large hospital dialysis units treat chronic patients, acute hospitalized patients and patients from other units. In the dynamics of large dialysis units, communication between the dialysis unit and hospital wards is often lacking, which can result in complications for the patient and a burden to staff. Dialysis patients would sometimes be hospitalized for a few days with dialysis staff only learning of this when they needed emergency dialysis.

Objectives

To improve communication between the dialysis unit and hospital departments, reduce the amount of unplanned treatments and identify all hospitalized dialysis patients.

Methods

Firstly, a permanent notification icon was attached to each hospitalized dialysis patient's computerized file for present and future use. Secondly, forms were created to improve communication between the dialysis unit and hospital wards.

Results

In our unit approximately 2400 treatments are performed per month on permanent patients; 140 on hospitalized patients and 140 on patients from other units. With the introduction of this system the computer identifies hospitalized dialysis patients, enabling our staff to schedule their dialysis in advance.

This resulted in better communication with the patients' home units, better preparation for their treatments, improved communication with the hospital departments and a reduction in the number of unscheduled dialysis treatments.

Conclusion/Application to practice

Dialysis units in hospital settings with a large number of chronic patients and hospitalized patients require a method of identification and follow-up for these patients and a method of effective communication between the dialysis unit and the hospital wards, thereby improving patients safety and enabling optimal medical care.

Disclosure: No conflict of interest declared

E-P 102

Audit - practice makes perfect

K. Nečesaná[1], L. Pařilová[1]
[1]Dialysis unit, B. Braun Austerlitz s.r.o., Ivančice, Czech Republic

Background

An audit carried out by accreditation bodies is not popular with healthcare professionals.
It engenders tension and fear.
However it is important to conducts such audits to evaluate the quality of the care offered and to improve standards.
Every dialysis unit can benefit from such an audit.
It is important to underline that all audits are carried out on a voluntary basis.

Objectives

The objective was to provide quality health care for patients through establishing criteria to improve standards and tools for evaluation in B. Braun Avitum dialysis centres

Methods

Internal / external audit
- regular inspections of documentation, evaluation of the quality of nursing care and compliance to the standards expected. This was done by the auditor.

Audit of hand hygiene
- overseen by a coordinator for hygiene in the dialysis centre. This was carried out monthly and results reported
- checking that cleaning and disinfecting of hands was done to the highest standard by both patients and staff
- education

Quality coordinator
- continuous monitoring of the compliance with nursing standards

Audit - preventing dislocation of the venous needle
- achieved by continual monitoring and reporting when this occurred.

Results

The audit should result in;
- qualified personnel capable to orient themselves in a different environment with the same nursing procedures
- high quality standards of care as a matter of course
- minimum of adverse events

Disclosure: No conflict of interest declared

E-P 103

Monitoring the quality of water for dialysis over the years

D. Králová[1]

[1]Dialysis unit, B. Braun Avitum s.r.o., Prague, Czech Republic

Background

Requirements for the quality of treated water for dialysis in the Czech Republic is established in the Czech Pharmacopoeia, which is based on European Union regulations - European Pharmacopoeina, both in terms of harmful organic and inorganic substances levels, and in terms of microbiological safety.

Objectives

Current methods of water treatment represent a technological chain. Our goal is the measurement of water quality, monitoring and maintaining the quality of water for haemodialysis, so that water used is safe and effective in terms of health care provision and that the final quality was demonstrable and stable with time.

Methods

Dialysis centres perform periodic water sampling. These samples are subjected to chemical, microbiological and endotoxin (LAL) analysis.
2013 – 2016 sampling frequency: chemical sampling twice yearly, microbiological analysis and LAL once monthly.
A sample from 6 HD and HDF monitors and circuit is taken. Sampling points for HDF and HD monitors alternate.
4/2016 – sampling frequency: chemical analysis once a year; microbiological and LAL water analysis once in 3-6 months (interval once in 6 months is possible in case that the microbiological and LAL analysis was below the limit of the defined values for 3 consecutive quarters).

Results

The quality of water for dialysis in our centre meets the required statutory limits and in terms of health care provision. The use of this water is safe and highly effective.

Conclusion/Application to practice

Conducting regular sampling of water for haemodialysis treatment and measuring the quality of water samples helps maintain the high quality of water.

Disclosure: No conflict of interest declared

E-P 104

Needle injuries in dialysis clinics

M. Liber[1], M. Kisiel[1]

[1]Dialysis centre Poznan, Fresenius Medical Care, Poznan, Poland

Background

Professionals with the highest risk of blood borne infections are clinical workers, especially nurses.

Objectives

Evaluation of the risk exposure of personnel working in 71 dialysis centres in Poland.

Methods

The recorded needle stick injuries and fluid splash episodes were evaluated between 2014 and 2016.

Results

Number of accidents/year: **44** in 2014, **41** in 2015, and **29** in 2016.

The following occupational groups were affected: nurses (**89,4.%),** cleaning staff (4**,4%),**physicians (**4.4%),** and technicians (**1.8%).**

94.7% of the accidents occurred in the dialysis room, **2.6%** in the examination room and **2.6**% in the technical room. Nurses were exposed to needle stick injuries during dialysis disconnections (**59,6%),** administration of drugs (**14.9%),** collection of blood samples (**5.3%),** and other activities (**5.3%).** Physicians injured themselves with scalpels while removing stitches (**4.3%),** cleaning staff while disposing of waste (**4.3%),** technicians when repairing machines (**1.8%)**. Nurses were affected by splashes mainly during the opening of the extracorporeal blood system or due to bloodlines leakage in **4.3%.**

Two types of containers for sharps used: 2 litre stationary or 5 litre on mobile frame. In 2016, clinics only used 5 litre containers.

Conclusion/Application to practice

1. Data analysis confirmed the occupational risk exposure of clinical workres, especially nurses.
2. Needle stick injuries of nurses and exposure to potentially infectious material mainly occurs during dialysis disconnection (59.6%).
3. When clinics started to use 5 litre containers for sharps (in 2016), the number of needle stick injuries decreased by 34.1% (versus 2014).

Disclosure: No conflict of interest declared

E-P 105

B. Braun House of Smiles - Experience with Social and Health Care

J. Novotná[1]

[1]House with a smile, B. Braun Avitum Austerlitz, Slavkov u Brna, Czech Republic

Background

The basic theme will be ageing of the population, the need for social services to Nephrology diseases and dialysed patients and the service provider "Home with a smile".
The origin of the idea of Home with a smile was, that more and more patients on dialysis needs help with securing of assistive devices and social services. On dialysis nurse specialist social Coordinator helps them. The nurse in a primary/ home care service is in charge of contact and awareness of local and specialist doctors and other social facilities. Clients do not need to undergo dialysis transport, they have everything under one roof - dialysis, rehabilitation, specialised doctors.

Staff of Home provides 24 hour care of clients.

Objectives

To present our new experience of working in House with a smile.

Conclusion/Application to practice

In order to avoid social isolation it is crucial to keep the social contact with them and the outside world. For example, we offer activities such as handmade work, cooking, baking, memory training, social events, in cooperation with schools and organizations in the city. We work with clients with personalized planning where they set personal goals. We support them in maintaining self-sufficiency and stimulate activity.

Disclosure: No conflict of interest declared

E-P 106

Palliative care for patients with end-stage renal disease

E. Bulbul[1], C. Sayan[2]

[1]Health Science Faculty, Nursing Department, Bezmialem Vakif University, Istanbul, Turkey; [2]Dialysis Depatment, Bezmialem Vakif University, Istanbul, Turkey

Objectives

The dialysis population has been growing progressively older. The incidence rates of End-stage renal disease (ESRD) are highest in patients 75 years old and older, and they continue to rise in this group. Older patients survive the shortest period of time on dialysis, and they withdraw from dialysis significantly more often than younger patients. In this period, they can need for palliative care.

The goal of palliative care is to relieve suffering and to support the best possible quality of life for patients and their families, regardless of their stage of disease or the need for other therapies, in accordance with their values and preferences.

Patients with ESRD face numerous threats to physical and emotional well-being from the time of diagnosis. Patients particularly individuals treated with dialysis, require active treatment to sustain life. They live with the knowledge that their survival depends on a machine and viable dialysis access. These patients also experience a multitude of symptoms as a result of renal disease and its treatment. Fatigue is often the most prevalent symptom reported. Other symptoms that occur with regularity include itching, headache, sleep disturbance, cramps, pain, shortness of breath, nausea/vomiting, numbness in the extremities, and muscle weakness.

ESRD and its treatment necessitate sweeping changes in lifestyle that impact every aspect of life and challenge the ability of patients and families to maintain an acceptable quality of life. Patients with ESRD would benefit from a palliative care program that includes symptom management, advance care planning, psychosocial and spiritual support.

Disclosure: No conflict of interest declared

E-P 107

Lactic acidosis therapy associated with lethal levels of metformin

P. Radovič[1]

[1]Dialysis unit, B. Braun Avitum s.r.o., Litoměřice, Czech Republic

Background

Successful management of severe lactic acidosis associated with baseline lethal level of metformin, 66 mcg/ml (normal
level approximately 0.1 mcg/ml). According to the Poison Control Centre in Prague, it has been so far the highest reported level of metformin.

Methods

We initiated gentle haemodialysis (flow rate of 200 ml/min) with ultrafiltration volume of 1,500 ml. The patient had anuria and at the time of AHD initiation she was conscious. Due to aggressively deteriorating condition and uneasiness associated with dyspnoea, we induced medical coma and started mechanical ventilation.
During the first 24 hours, the patient underwent an ADH lasting for 9 hours. Subsequently, the patient underwent six sessions of AHD daily lasting for 5 hours, followed by five AHD sessions every other day. Haemodialysis was discontinued after 16 days. The patient had polyuria.
On day 37, the patient was conscious, breathing spontaneously, communicating, walking during physiotherapy training; the patient reported no symptoms and ate well, and we scheduled her transfer to a standard care unit.

Results

Table will show - Evaluation of the change in serum potassium, lactate, urea, creatinin levels in time.

Conclusion/Application to practice

Due to promptly initiated haemodialysis therapy in high doses and excellent cooperation with the ICU, we managed to reverse the very unfavourable acute condition of the patient. Despite the lethal level of the drug, the patient was, after 37 days of treatment, without any symptoms.
Without these modern methods of haemodialysis treatment, management of such a critical health condition of the patient would not have been possible.

Disclosure: No conflict of interest declared

E-P 108

Dialysis dose assessment depending on the vascular access

M. Rojo[1], R. Pelayo[1], C. Villa[1], P. Martinez[1], M. Gándara[1], M.J. Cagigas[1], M.E. Cuadrado[1]
[1]Haemodialysis Unit, Hospital Universitario Marques de Valdecilla, Santander, Spain

Background

Achieving an adequate dialysis is the main haemodialysis aim. The dialysis dose (DD) is the best marker, being necessary to have an optimum vascular access (VA). An arteriovenous (AV) fistula is the choice of vascular access.

Objectives

Evaluation of the dialysis dose depending on the vascular access.

Methods

A four-week prospective descriptive study in haemodialysis patients dialyzed for two months with the same VA.
The DD was assessed using Kt and Kt/V. The Kt was measured by the monitor in every session, adequacy being > 45L for women and >50L for men. The Kt/V (adequate ≥ 1.3) was calculated along the study with *Daugirdas*' *second generation formula.*
Socio-demographic and clinical data were collected from the patient´s history.
All statistical analysis was performed using SPSS program v. 15.0 for windows.

Results

45 patients were studied with average age 66.78 years old, 60% were men, and 31% of the total used an AV fistula.
While 71.4 % of the patients using an AV fistula obtained a Kt of 49.6L, 77.4% of those using a long-term venous catheter got 47.6L.
The Kt/V values obtained were 1.56 in patients with an AV fistula (adequate for 78.6%) and 1.55 in those with a long-term venous catheter (adequate for 77.4 %).
There was no statistically significant difference among the dialysis dose (measured by Kt and Kt/V) and the combination of factors like the dialysis technique or dialyzer type.

Conclusion/Application to practice

In our study there is no significant difference in the dialysis dose regarding the vascular access.

Disclosure: No conflict of interest declared

E-P 109

How is fluid restriction experienced and managed by patients on haemodialysis?

H. Hermansen[1]

[1]Renal Medicine, Aarhus University Hospital, Aarhus N, Denmark

Background

Patients on haemodialysis have to live with a restricted fluid intake, one of the many restrictions treatment demands. Adhering to the fluid restriction is critical when considering patient prognosis. According to the evidence compliance with restricting fluid is challenging for patients. The majority of patients on haemodialysis do not comply with the recommended fluid restriction.

Objectives

To deepen understanding of this challenging restriction for patients and to find out how patients cope with it on a daily basis.

To provide renal nurses with the tools necessary to support patients should they experience difficulties with their fluid intake.

Methods

Semistructured qualitative interviews with four patients on haemodialysis were conducted. Interviews were transscribed and analysed using the Aaron Antonovsky theory/method.

Results

Patients on haemodialysis use different strategies to help them restrict their fluid intake. This is done in order to maintain as normal a life as possible.

Conclusion/Application to practice

To optimise nursing support, to develop a closer nurse patient relationship that will inform knowledge and reveal unsuitable patient strategies. Moreover, to apply the individual patient resources.

Disclosure: No conflict of interest declared

E-P 110

CKD patients' perception of nursing care

C. Santos-Cunha[1], A.P. Martins[1], M. Fernandes[1], T. Magalhaes[1], C. Cunha[1], M. Cunha[1], M. Fonseca[1], J. Pinheiro[1, 2], J. Fazendeiro Matos, [3], M.T. Parisotto[4]

[1]NephroCare Fafe, Fresenius Medical Care, Fafe, Portugal; [2]Health Science Institute, Portuguese Catholic University, Porto, Portugal; [3]NephroCare Portugal, Fresenius Medical Care, Porto, Portugal; [4]Care Value Management, Fresenius Medical Care, Bad Homburg, Germany

Background

According to Pagels et al. (2011), patients with the same disease can have different perceptions of their condition and the patient's view of his/her disease may differ from that of health care providers. Research indicates that illness representations also predict several health-related behaviours such as adherence to medication, lifestyle changes, and coping. Time-consuming haemodialysis was found to be critical for patients.

Objectives

To describe the subjective perceptions of patients receiving nursing care.
Analyse patients' verbal and non-verbal emotions and feelings as reported by nurses during haemodialysis treatment.

Methods

We conducted a qualitative and descriptive study. Study participants met the following inclusion criteria: Patients over 18 years undergoing haemodialysis, who understand the content of the interview and communicate verbally. An open interview was carried out with two questions. The first aimed to investigate about the patients' perceptions about the nurses upon the first interaction with the patients in the dialysis room. The second question asked how patients perceive the nurses' behaviour during the treatment. The data were recorded and submitted for analysis.

Results

Analysis of the interviews revealed two main themes, such as: *Nurse, the technician* and *Nurse, the caregiver.*

Conclusion/Application to practice

For both questions we obtained the same two types of answers. This study showed that the nurse is viewed as a technician or as a caregiver. Both characteristics of nurses are associated with aspects that patients consider of high importance, such as the cannulation technique or the attention that nurse pays to the patient.

Disclosure: No conflict of interest declared

E-P 111

CKD patients' reaction to the disease

C. Cunha[1], C. Santos-Cunha[1], A.P. Martins[1], M. Cunha[1], T. Magalhaes[1], M. Fonseca[1], J. Pinheiro[1, 2], J. Fazendeiro Matos[3], M.T. Parisotto[4]

[1]NephroCare Fafe, Fresenius Medical Care, Fafe, Portugal; [2]Health Science Institute, Portuguese Catholic University, Porto, Portugal; [3]NephroCare Portugal, Fresenius Medical Care, Porto, Portugal; [4]Care Value Management, Fresenius Medical Care, Bad Homburg, Germany

Background

"What people think about their illness may influence the way they deal and cope with it. Thus, disease behavior is a socially learned response, strongly influenced by others through molding/learning, socialization, past experiences, and by one's own personal culture." (Paúl & Fonseca, 2001). Knowing that chronic kidney disease (CKD) is not an easy disease, for some it is a peaceful process, because they were already prepared by healthcare professionals or because they have specific personality, characteristics, for others it is considered turbulent (Cunha, 2016).

Objectives

To clarify whether the reaction to the disease depends on the respective person.

Methods

We conducted a systematic literature review starting from the question: "What impact has CKD on a person?"

Results

Based on the analysis of the first two articles of our search, we acknowledged the necessity to evaluate what the patient knows about the disease. With the third article search, we reinforced our idea of the influence of a multidisciplinary team on a patient's reaction and apprehension regarding the disease, but not how to deal with a regular haemodialysis programme.

Conclusion/Application to practice

We concluded that people with CKD react differently to their disease. This is due to the changes related to biopsychosocial and physical aspects, since many people stop working and to pursue leisure activities while others feel sad. The way they receive the diagnosis has a different impact. As a matter of course, every person receives the news and reacts in her/his own way. Defence mechanisms can be minimised through the intervention of health care professionals.

Disclosure: No conflict of interest declared

E-P 112

Live kidney transplantation in Montenegro

D. Pelicic[1], D. Radunovic[2], D. Dobrovic[3]

[1]Center for Science, Clinical Cente of Montenegro, Podgorica, Montenegro; [2]Department of Nephrology, Clinical Cente of Montenegro, Podgorica, Montenegro; [3]Administration, Clinical Cente of Montenegro, Podgorica, Montenegro

Background

In Montenegro, the kidney transplant program began relatively late in
September 2012.

Methods

A retrospective study took place from the years 2012 to2017

Results

A total of 30 kidney transplants in Montenegro
A total of 27 kidney transplants from living related donor
Total 1 cadaveric kidney transplantations
Total 2 / emotional / spouses
relations:
Cadaver donors: 1
wife donated her husband: 2
mother donated his son, 7
father donated his son: 1
mother donated daughters: 2
father donated daughters: 1
brother donated sisters: 2
brother donated brother: 5
sister donated sisters: 2
sister donated brother: 2
uncle donated cousin: 1
aunt donated sister: 1

Conclusion/Application to practice

In Montenegro the number of live transplants is much greater than cadervaric. The largest number of living donors women were women, and the largest amount of recipients were men.

Disclosure: No conflict of interest declared

E-P 113

Emotional kidney transplantation in Montenegro

D. Pelicic[1], D. Radunovic[2], D. Dobrovic[3]

[1]Center for Science, Clinical Centre of Montenegro, Podgorica, Montenegro; [2]Nephrology, Clinical Centre of Montenegro, Podgorica, Montenegro; [3]Administration, Clinical Centre of Montenegro, Podgorica, Montenegro

Background

In our country the emotional transplantation is not prohibited by law, but it is also poorly regulated. Therefore, to perform this type of transplant requires the approval of the ethical committee whose task is to rule out the possible sale of organs.

Objectives

To determine which factors influence the female gender to donate her organs to her husband.

Methods

A retrospective study from 2012-2017.

Results

In less than five years in Montenegro has transplanted thirty patients. Of these, only one cadaver and 29 living transplants.

Of the total number of transplant patients, two of the male patients received a kidney from his lawful wife.

Conclusion/Application to practice

It can be concluded that Montenegro still patriarchal state. Women in Montenegro are willing to donate an organ to their partner.

Men are not interested in donating an organ to their partner/wife.

Disclosure: No conflict of interest declared

E-P 114

Religion of citizens of Montenegro and organ donation

D. Pelicic[1], N. Radojevic[2], D. Dobrovic[3], V. Stojanovic[4], D. Bokan[5], D. Radunovic[6]

[1]Center for Science, Clinical Centre of Montenegro, Podgorica, Montenegro; [2]Department of Forensic Medicine, Clinical Centre of Montenegro, Podgorica, Montenegro; [3]Administration, Clinical Centre of Montenegro, Podgorica, Montenegro; [4]Pediatric Intensive Care, Institute for Child and Youth Health Care Vojvodine, Novi Sad, Serbia; [5]Clinical Trials Unit, Institute for Pulmonary Diseases of Vojvodina, Novi Sad, Serbia; [6]Nephrology, Clinical Centre of Montenegro, Podgorica, Montenegro

Background

In Montenegro, in 2009 a law was passed on transplantation of human body parts, organs and tissues for medical purposes, which was in line with European and international legislation. One of the most important segments of the transplant program is to increase and spread knowledge about the importance of transplantation in the professional and lay population. However, many studies show that there is a disproportionate ratio of donor organs and the necessary authority required to use them, the main problem in this area.

Objectives

Determine whether religion affects the organ donation in Montenegro.

Methods

Cross sectional study.

Results

The analysis of data on the religion of respondents found that the largest group in the sample were 336 Orthodox faith (84%), followed by Islamic 44 (11%) and Catholic 19 (4.8%).Patients from both groups were asked for the reason of their negative attitudes towards organ donation cited lack of public awareness regarding the transplantation and organ donation.

Conclusion/Application to practice

Religion has no impact on organ donation in Montenegro.

Disclosure: No conflict of interest declared

E-P 115

Urgent transplantation - the last chance for life?

J. Družincová[1]

[1]Dialysis Unit, B. Braun Avitum, Ostrava, Czech Republic

Background

The aim of this paper is present a case report of a 52-year-old polymorbid man who, in 2012, ended up in a dialysis program due to end-stage renal failure

Objectives

In the predialysis program, an AVF on the left upper arm was created. The AVF did not develop, therefore CVC had to be introduced - was associated with multiple infections and thrombotic complications - the patient underwent four re-cannulations. In 2013 - re-creation of the AVF on the right upper arm.

Due to poor compliance and large weight gains during the dialysis, the patient, in 2016, developed a non-healing defect above the AVF with the risk of rupture. Therefore, the AVF was ligated. Again reinserted the CVC, which was functional only for a short time.

Results

With limited opportunities for the introduction of a new vascular access the patient was included in the urgent waiting list. A donor was found within three days, and the patient preparted for transplantation. Despite a month-old record of Doppler ultrasonography, which confirmed no contraindications for transplantation, during the surgery, the patient was diagnosed with thrombosis of the pelvic vessels on the left side, which made implantation of the graft impossible.

Conclusion/Application to practice

In 2012, the patient could have been included in the transplantation program If so, he would now be successfully transplanted. However, due to his careless approach to his health, he continues on the transplant pool, waiting in hope for a suitable match.

Disclosure: No conflict of interest declared

E-P 116

Renal transplantation in a patient with aHUS caused by a rare variation of CFB

V. Sinković[1]

[1]University Hospital Centre Zagreb, Departmant of nephrology, arterial hypertension, dialysis and kidney transplantation, Zagreb, Croatia

Background

Atypical hemolytic uremic syndrome (aHUS) or complement-mediated HUS is caused by complement gene mutations or antibodies to complement factor H (CFH). It is characterized by hemolytic anemia, thrombocytopenia and renal impairment. ESRD that is a result of aHUS not responding to plasma therapy or relapsing, requires dialysis or renal transplantation. In this case-report we will present a patient with aHUS who has had a successfull renal transplant.

Objectives

A 50-year-old female patient was diagnosed with thrombotic microangiopathy in 2010. She was treated with more than 150 therapeutic plasma exchanges, immunosuppressive and steroid therapy. Genetic analysis revealed a rare synonymous variation R381R of complement factor B. She was found to be heterozygous for the CFH H3 haplotype, and was diagnosed atypical hemolytic uremic syndrome. In 2012 she started haemodialysis treatmant.
In April 2016. She had a transplant from a deceased donor with eculizumab induction, followed by tacrolimus, mycophenolate mofetil and steroids. Eculizumab 900mg was applied in additional 3 doses of 900mg followed one week later with dose of 1200mg. Protocol graft biopsy performed one week after transplantation revealed a mild vascular rejection. One month after transplantation serum creatinine increased, without laboratory signs of hemolysis. Patient was addmited to hospital, underwent renal allograft biopsy which revealed acute allograft rejection IIA, and was treated with Eculizumab and 3 boluses of steroids. Eculizumab 900mg was continued on weekly basis. Graft function is currently stable without any signs of HUS reccurence, and Eculizumab is applied every two weeks.

Conclusion/Application to practice

Patients with aHUS who undergo a renal transplant are at a high risk of reccurence and/or allograft rejection. Post transplant nursing care includes prevention and early detection of potential complications, supporting and empowering patients to care for themselves in terms of their renal function and immunosuppressive therapy, but also from a psychosocial perspective.

Disclosure: No conflict of interest declared

E-P 117

Options of transplant treatment of dialysed patients

G. Kolesárová[1], M. Janovská[1]

[1]Dialysis unit, B. Braun Avitum s.r.o., Roudnice nad Labem, Czech Republic

Background

Kidney transplantation is currently the most efficient treatment of chronic renal failure. However, an offer of available organs is not high enough to satisfy demand. Although there were 453 kidney transplantations performed in 2015, there is still more than 500 patients on the waiting list and there are over 6000 patients included into the dialysis program.

Czech Society of Nephrology recommends to treat every patient in terminal phase of chronic renal failure with absence of contraindications by kidney transplant. To reveal contraindications, patients undergo thorough examination in the transplant centers, which decide about his/her classification on the waiting list. Patients are often included into the cadaver donor kidney transplant program. However, if there is a suitable living donor, it is a matter of choice to enroll the patient to living donor kidney transplant program and especially in time before the initiation of dialysis treatment. Nowadays living donor is considered a blood relative person, blood non-relative person and even emotionally related person. There is another option to increase kidney graft pool, programs called paired kidney exchange or chain kidney donations.

Conclusion/Application to practice

According to statistics, transplantation from living donor reaches better results, in respect to an average length of patients‘ survival, in comparison to transplantation from cadaver donor. Although the dialysis treatment remains the only choice of treatment for many patients with terminal kidney failure, the average length of patients‘ survival is shorter compared to transplanted patients. However, dialysis is still the most common and most affordable treatment of renal failure.

Disclosure: No conflict of interest declared

CONFERENCE CONTACTS

EDTNA/ERCA SECRETARIAT & MEMBERSHIP OFFICE

Excellent Branding AB
Källstorps Gård
Högs Byväg 118
S-246 55 Löddeköpinge, Sweden
Phone: +46 46 70 96 26
edtna_erca@adexcellentbranding.com

EDTNA/ERCA COLLABORATION & PARTNERSHIP, EXHIBITION & SPONSORHIP

P&B - Presentation & Branding AB
Mrs. Anki Davidson, Marketing Director
Mobile +46 721 94 00 10
edtnaerca@presentation-branding.com

EDTNA/ERCA CONFERENCE DEPARTMENT & REGISTRATION

GUARANT International spol. s r.o.
Na Pankráci 17
CZ-140 21 Prague 4, Czech Republic
Phone: +42 02 84 00 14 44
Fax: +42 02 84 00 14 48
edtnaerca2017@guarant.cz

CONFERENCE VENUE

ICE in Krakow
Marii Konopnickiej 17
30-302 Kraków
Poland
www.icekrakow.pl

EDTNA/ERCA LEGAL ADDRESS

Pilatusstrasse 35, CH-6003 Lucerne, Switzerland

AUTHORS' CONTACTS

Guest speakers (in alphabetical order)

Tania Barnes	tania.barnes@sth.nhs.uk
Hans Bart	Bart@nvn.nl
Andrew Cox	andy.cox@medtronic.com
Paul Challinor	Paul.Challinor@bbraun.com
Annette Dodds	e-mail address is not available
Evangelia Dounousi	evangeldou@gmail.com
Maurizio Gallieni	Maurizio.Gallieni@unimi.it
Siobhan Gladding	sgladding@nxstage.com
Vania Gomes Gonçalves	gomes.vaniag@gmail.com
Bettie Hoekstra	bettiehoekstra@live.nl
Marta Hrenczuk	marta.hrenczuk@wum.edu.pl
Neerja Jain	NeerjaJain@kidneyresearchuk.org
Karen Jenkins	karenjenkins1@nhs.net
William Johnston	willjohnston1@hotmail.co.uk
Anna Klis	aneczkakl@interia.pl
Navdeep Kumar	n.kumar@ucl.ac.uk
Alison McHugh-Larkin	larkin.alison@gmail.com
Anna Lepkowska	anna.lepkowska@ihtpolska.com
Paul Van Malderen	Paul.Van.Malderen@olvz-aalst.be
Julia McCarthy	e-mail address is not available
Martin Meier	martin.meier@bbraun.com
Peter O´Halloran	p.ohalloran@qub.ac.uk
Margarita Oikonomou	ritaikonomu@yahoo.gr
Joanna Reid	j.reid@qub.ac.uk
Marie Richards	marichards@sds.seha.ae
Ruben Iglesias Sanjuan	riglesias1977@gmail.com
John Sedgewick	john.sedgewick@btopenworld.com
Theodora Eirini Sialvera	dsialvera@gmail.com
Veronica Swallow	V.M.Swallow@leeds.ac.uk
Zbylut Twardowski	Twardowskiz@health.missouri.edu
Raymond Vanholder	Raymond.Vanholder@ugent.be
Ben Weise	e-mail address is not available
Andrzej Więcek	awiecek@sum.edu.pl
Tai Mooi Ho Wong	TMHo@parcdesalutmar.cat

Corporate Education Session speakers (in alphabetical order)

Stefaan Claus	e-mail address is not available
Helga Frank	e-mail address is not available
Daniel Gallego	e-mail address is not available
Maurizio Gallieni	e-mail address is not available
Joao Fazendeiro Matos	jfazendeiro.matos@fmc-ag.com
Cristina Miriunis	cristina.miriunis@fmc-ag.com
Maria Teresa Parisotto	mparisotto@icloud.com

DOPPS

Anna Marti i Monros	anna.marti.monros@gmail.com
Yolande Pirard	yolande.pirard@skynet.be
Sunny Eloot	sunny.eloot@ugent.be
Martin Schünemann	Martin.Schuenemann@gmx.net
Marisa Pegoraro	msarisapegoraro.996@gmail.com
Giovanni Carbone	carbonegiovanni6@gmail.com
Jeanette Wallin	jeanette.wallin@ds.se
Elena Cavero Porrero	elenacavero@outlook.es
Rafael Casas	rafcasas@ono.com
Jennie King	jennieking2013@gmail.com
Birsen Yürügen	birsenyurugen@gmail.com
Zehra Aydin	zehraydin@gmail.com
Karen Chalmers	karen.chalmers@nhs.net

Oral presentations (by presentation number)

O 01	sunny.eloot@ugent.be
O 02	jfazendeiro.matos@fmc-ag.com
O 03	jfazendeiro.matos@fmc-ag.com
O 04	cathy.poole@fmc-ag.com
O 05	cristina.miriunis@fmc-ag.com
O 06	jgolland@gmail.com
O 07	seftura.bucuresti@fmc-ag.com
O 08	jfazendeiro.matos@fmc-ag.com
O 09	aalalmetere2@kau.edu.sa
O 10	leanne.brown2@health.qld.gov.au
O 11	ann.bonner@qut.edu.au
O 12	julie.reynolds@sa.gov.au
O 13	sunny.eloot@ugent.be
O 16	aframp@blanquerna.url.edu
O 17	h-a88@hotmail.com
O 18	jfazendeiro.matos@fmc-ag.com
O 19	svdzwaart@live.nl
O 21	zehraydin@gmail.com
O 22	eylembag@yahoo.com
O 23	lenesons@rm.dk
O 24	jfazendeiro.matos@fmc-ag.com
O 25	neerjajain@kidneyresearchuk.org
O 26	jfazendeiro.matos@fmc-ag.com
O 27	helena.crona@sll.se
O 28	jfazendeiro.matos@fmc-ag.com
O 29	96205@parcdesalutmar.cat
O 30	aklis@tlen.pl
O 31	trichoub@hotmail.gr
O 32	alice.neradova@bbraun.com
O 33	marie-chantal.loiselle@usherbrooke.ca
O 34	jfazendeiro.matos@fmc-ag.com

Poster presentations on stage (by poster number)

O-P 01	jguerrero@friat.es
O-P 02	peninah@hadassah.org.il
O-P 03	sunny.eloot@ugent.be
O-P 04	copurbanu@hotmail.com
O-P 05	jfazendeiro.matos@fmc-ag.com
O-P 06	sandrarubiopaez@gmail.com
O-P 07	jfazendeiro.matos@fmc-ag.com
O-P 08	jfazendeiro.matos@fmc-ag.com
O-P 09	jfazendeiro.matos@fmc-ag.com
O-P 10	despinakitsouli@hotmail.com
O-P 11	trzaneta@gmail.com
O-P 12	rodenmichel@gmail.com
O-P 13	linash64@gmail.com

O-P 14	marzena.krupinska@avitum.com.pl
O-P 15	despotheo@yahoo.gr
O-P 16	kim.blair@fmc-ag.com
O-P 17	ebulbul1@yahoo.com
O-P 18	jfazendeiro.matos@fmc-ag.com
O-P 19	anna_mroz@op.pl
O-P 20	jfazendeiro.matos@fmc-ag.com
O-P 21	jeajee@rm.dk
O-P 22	jfazendeiro.matos@fmc-ag.com
O-P 23	durtova.gabriela@vfn.cz
O-P 24	cristiana.dente@aslbi.piemonte.it
O-P 25	ahlam.matanis@gmail.com
O-P 26	giuseppedipietro73@libero.it
O-P 27	ge_7_4@hotmail.com
O-P 28	faressrouji@gmail.com
O-P 29	gyulane.szakacs@bbraun.com
O-P 30	jfazendeiro.matos@fmc-ag.com
O-P 31	maria-teresa.parisotto@fmc-ag.com
O-P 32	jfazendeiro.matos@fmc-ag.com
O-P 33	mrichards@seha.ae
O-P 34	mukaddermollaoglu@hotmail.com
O-P 35	audreymooney23@hotmail.com
O-P 36	ilanite@bmc.gov.il
O-P 37	ygulbin@gmail.com
O-P 38	jfazendeiro.matos@fmc-ag.com
O-P 39	siakav@yahoo.com
O-P 40	ann.bonner@qut.edu.au
O-P 41	ayiles@hotmail.com
O-P 42	danijela.cos@gmail.com
O-P 43	judittterenyi@gmail.com
O-P 44	natasa.graho@gmail.com
O-P 45	avschavs@mac.com
O-P 46	corina.popescu@fmc-ag.com
O-P 47	zuzana.svarcova@bbraun.com
O-P 48	sonja.pecolar@sb-sg.si
O-P 49	cvetka.krel@gmail.com
O-P 50	annajanus.janus@gmail.com
O-P 51	melero.esperanza@gmail.com
O-P 52	Nette.solskov@skejby.rm.dk
O-P 53	emangahis@nhs.net
O-P 54	jfazendeiro.matos@fmc-ag.com
O-P 55	laura.thompson@chsft.nhs.uk

Digital poster presentations on stage (by poster number)

E-P 001	tamasne.andor@bbraun.com
E-P 002	ann.bonner@qut.edu.au
E-P 003	leanne.brown2@health.qld.gov.au
E-P 004	mahrova@centrum.cz
E-P 005	jfazendeiro.matos@fmc-ag.com
E-P 006	nihal.khatib@gmail.com
E-P 007	evgvolodina@mail.ru
E-P 008	eileen.cassidy@bbraun.com
E-P 009	hm44@aub.edu.lb
E-P 010	eyada7595@gmail.com
E-P 011	maria.fettouhi@rsyd.dk
E-P 012	mahhazaher@gmail.com
E-P 013	nusret.mehmedovic@fmc-ag.com
E-P 014	nusret.mehmedovic@fmc-ag.com
E-P 015	akyol.asiye@gmail.com
E-P 016	alenka.biteznik@gmail.com
E-P 017	jfazendeiro.matos@fmc-ag.com
E-P 018	helena.jerabkova@bbraun.com
E-P 019	sona.iterska@bbraun.com
E-P 020	litsaprev@gmail.com
E-P 021	tamas.szabo@bbraun.com
E-P 022	helen.harrung@sll.se
E-P 023	LENA4581@GMAIL.COM
E-P 024	mukaddermollaoglu@hotmail.com
E-P 025	belahal59@gmail.com
E-P 026	celine.olbrechts@uzbrussel.be
E-P 027	sandrarubiopaez@gmail.com
E-P 028	jfazendeiro.matos@fmc-ag.com
E-P 029	Malgorzata.Liber@fmc-ag.com
E-P 030	seftura.bucuresti@fmc-ag.com
E-P 031	seftura.bucuresti@fmc-ag.com
E-P 032	seftura.bucuresti@fmc-ag.com
E-P 033	daniela.toma@fmc-ag.com
E-P 034	jfazendeiro.matos@fmc-ag.com
E-P 035	ayvaz.katip3543@gmail.com
E-P 036	jfazendeiro.matos@fmc-ag.com
E-P 037	jfazendeiro.matos@fmc-ag.com
E-P 038	lagarde.jm@orange.fr
E-P 039	beata.krokowska@avitum.com.pl
E-P 040	unalays@hotmail.com
E-P 041	ceccia79@hotmail.it
E-P 042	erika.tormasi@fmc-ag.com
E-P 043	maria.asztalos@bbraun.com
E-P 044	tamas.szabo@bbraun.com
E-P 045	christopher.flores@bartshealth.nhs.uk
E-P 046	aliossatou@gmail.com
E-P 047	radmila.vojancova@bbraun.com
E-P 048	niina.reinikka@pshp.fi
E-P 049	helena.jerabkova@bbraun.com
E-P 050	l.kata0923@gmail.com
E-P 051	r_grivats@rambam.health.org.il
E-P 052	jfazendeiro.matos@fmc-ag.com
E-P 053	bernanilgun@gmail.com
E-P 055	irisromach@gmail.com
E-P 056	irisromach@gmail.com
E-P 057	jfazendeiro.matos@fmc-ag.com
E-P 058	preda_auro@yahoo.com
E-P 059	zehraydin@gmail.com
E-P 060	anna_mroz@op.pl
E-P 061	linash64@gmail.com
E-P 062	stuart.gerty@nhs.net
E-P 063	jfazendeiro.matos@fmc-ag.com
E-P 064	nefrodial.celje@fmc-ag.com
E-P 065	mirjanamihalic5@gmail.com
E-P 066	mivekovi@gmail.com
E-P 067	dialmaya@freemail.hu
E-P 068	8159Leon-Sup@fmc-ag.com
E-P 069	cristina.miriunis@fmc-ag.com

E-P 070	helena.klaric@gmail.com
E-P 071	trzaneta@gmail.com
E-P 072	edyta.gorecka@davita.com
E-P 073	senka.besedic@gmail.com
E-P 074	krisztina.bari@fmc-ag.com
E-P 075	senka.besedic@gmail.com
E-P 076	dilek3566@hotmail.com
E-P 077	dilek3566@hotmail.com
E-P 078	dilek3566@hotmail.com
E-P 079	bernanilgun@gmail.com
E-P 080	aytenkrkc@gmail.com
E-P 081	aytenkrkc@gmail.com
E-P 082	adrienn.jakab@fmc-ag.com
E-P 083	nbednjanec@gmail.com
E-P 084	tothnevagner77@freemail.hu
E-P 085	mirliana@uchile.cl
E-P 086	kayo.y.2304@gmail.com
E-P 087	ivana.hlavackova@bbraun.com
E-P 088	martina.vnucakova@bbraun.com
E-P 089	sunny.eloot@ugent.be
E-P 090	martina.gardosova@bbraun.com
E-P 091	renata.bayerova@bbrun.com
E-P 092	pilar@capsademusics.com
E-P 093	jfazendeiro.matos@fmc-ag.com
E-P 094	maria-teresa.parisotto@fmc-ag.com
E-P 095	monica.silva@diaverum.com
E-P 096	jfazendeiro.matos@fmc-ag.com
E-P 097	ferencne.gerhak@fmc-ag.com
E-P 098	unalays@hotmail.com
E-P 099	zkinga76@freemail.hu
E-P 100	reginah@assuta.co.il
E-P 101	ShadenB@gmc.gov.il
E-P 102	karolina.necesana@bbraun.com
E-P 103	dita.kralova@bbraun.com
E-P 104	Malgorzata.Liber@fmc-ag.com
E-P 105	jarmila.novotna@bbraun.com
E-P 106	ebulbul1@yahoo.com
E-P 107	petr.radovic@bbraun.com
E-P 108	mrojo8_@hotmail.com
E-P 109	hanne.hermansen@skejby.rm.dk
E-P 110	jfazendeiro.matos@fmc-ag.com
E-P 111	jfazendeiro.matos@fmc-ag.com
E-P 112	damir.pelicic@t-com.me
E-P 113	damir.pelicic@t-com.me
E-P 114	damir.pelicic@t-com.me
E-P 115	jana.druzincova@bbraun.com
E-P 116	vlatkasinkovic7@gmail.com
E-P 117	gabriela.kolesarova@bbraun.com

AUTHORS´INDEX

A
Abreu, S. **E-P 028**
Abu Khalil, E. **E-P 010**
Aftyka A. **O-P 19; E-P 060**
Akin, O. **E-P 076; E-P 077**
Akyol, A. **E-P 015**
Albuquerque, O. **O 08**
Alcalar, N. **E-P 080; E-P 081**
Alikari, V. **E-P 046**
Almutary, H. **O 09**
Álvarez Morales, S. **O 29**
Amado, L. **E-P 034; E-P 036; E-P 037**
Ambrosio, F. **O-P 05**
Amendoeira, J. **O-P 18**
Antunes, C. **O-P 54**
Araujo, H. **O 34**
Armaly, H. **O 17**
Armaly, Z. **O 17**
Asztalos, M. **E-P 043**
Atouguia, J. **E-P 028**
Atsy, E. **E-P 025**
Avdal, E.U. **E-P 035; E-P 053; E-P 079**
Aydin, Z. **O 21; E-P 059**
Ayvaz, I. **E-P 035**

B
Badin, S. **E-P 101**
Baek, B. **E-P 011**
Bach Pascual, A. **O 29**
Bakar, Y. **O 21; E-P 59**
Baker, L. **O-P 16**
Balci, D.D. **E-P 076; E-P 077; E-P 078**
Balla, J. **E-P 074**
Barci, F. **O-P 26**
Barnes, T. **GS- S 24**
Barros, J. **O 26**
Başer, E. **O-P 34**
Bastar, A. **E-P 031**
Bašić-Jukić, N. **O-P 42**
Bart, H. **GS- S 14**
Bayerová, R. **E-P 091**
Bayraktar, N. **E-P 098**
Beddows, N. **O 04**
Bednjanec, N. **E-P 083**
Ben Shahar, E. **E-P 023**
Ben Shitrit, S. **E-P 051**
Ben-Dov, I. **O-P 02**
Bernardo, A. **O 34**
Bernardo, J. **O-P 05**
Bernshtein, T. **O-P 13**
Berquier, I. **O 11; E-P 002**
Besedic, S. **E-P 073; E-P 075**
Bevc, S. **O-P 49**
Bhana, G. **O 25**
Biro B. **E-P 050**
Biteznik, A. **E-P 016**
Blair, K. **O-P 16**
Bokan, D. **E-P 114**
Bőke, M. **E-P 082**
Boldeiu, I. **O 07**
Bonner, A. **O 09; O 010; O-P 40; E-P 002; E-P 003**
Brown, L **GS-S 04; O 10; E-P 003**
Bulbul, E. **O-P 17; E-P 040; E-P 098; E-P 106**
Burnapp, L. **O 25**
Byhmer, P. **GS- S01**

C
Cagigas, M.J. **E-P 108**
Caires, C. **E-P 028**
Calado, M. **O 28**
Cale, P. **O-P 09**
Camisa, R. **O 08; O-P 20; O-P 32**
Campos, S. **O-P 07; E-P 096**
Carvalho, J. **O-P 08**
Carvalho, T. **O-P 18**
Cassidy, E. **E-P 008**
Castillo Piña, Y. **O 29**
Cavus Ergul, H. **O-P 04**
Cerejo, M.N. **O 28**
Cerna, M. **E-P 004**
Cetın, M. **E-P 098**
Challinor, P. **GS- W 08**
Chambers, S. **O-P 40**
Chaplin, B. **E-P 002**
Cicek, E.E. **E-P 040; E-P 098**
Claus, S. **O 01; CES-S 10**
Ćosić, D. **O-P 42**
Costa, E. **O-P 22; O 26; E-P 036; E-P 37**
Cox, A. **GS- W 02**
Crisp, D. **O 04**
Crols, S. **E-P 026**
Crona, H. **O 27**
Cruz, M. **O 18**
Cuadrado, M.E. **E-P 108**
Cunha, C. **E-P 093; E-P 110; E-P 111**
Cunha, M. **E-P 093; E-P 110; E-P 111**

D
Davidson, A. **GS- S 01**
De Bruyne, E. **O 13**
Delgardo, A. **O-P 33**
Deligoz Bildaci, Y. **O-P 17**
Deman, E. **E-P 089**
Demirbas, A. **E-P 076; E-P 077; E-P 078**
Dhondt, A. **O 01**
Di Pietro, G. **O-P 26**
Dickinson, S. **E-P 062**
Dierick, M. **O 01**
Dika, Z. **E-P 065**
Dileo, D. **O-P 26**
Dinis, S. **O-P 09; O-P 20; O-P 32**
Długoborska, K. **O-P 19; E-P 060**
Dobrovic, D. **E-P 112; E-P 113; E-P 114**
Doctors and Nursing Staff Haemodialysis Unit Uz Brussel **E-P 026**
Dodds, A. **GS- S 22**
Domingos, E. **E-P 028**
Douglas, C. **O 11; E-P 002**
Douglas, D. **O 09**
Dounousi, E. **GS- S 09**
Drähne, A. **GS- S 01**
Družincová, J. **E-P 115**
Duarte, M. **O 03; O-P 08; O-P 30**
Durmaz Akyol, A. **O-P 37**
Durtova, G. **O-P 23**

E
Edri, I. **O-P 36**
Efeyurtlu, D. **E-P 076; E-P 077; E-P 078**
Elcioglu, O.C. **O-P 17**
Eloot, S. **O 01; O 13; O-P 03; E-P 089**
Esen, B. **E-P 080; E-P 081**
Esteve, V. **O-P 06; E-P 27; E-P 092**
Estruga, P. **O-P 06; E-P 027; E-P 092**

F
Falk, B. **O-P 36**
Faura Vendrell, A. **O 29**
Fazendeiro Matos, J. **GS-S 03; O-P 05; O 02; O 03; O-P 07; O-P 08; O-P 09; O 08; O-P 18; O-P 20; O-P 22; O 18; O-P 30; O-P 32; O 24; O 26; O-P 38; O 28; O 34; O-P 54; E-P 005; E-P 028; E-P 34; E-P 36; E-P 37; E-P 052; E-P 057; E-P 063; E-P 093; E-P 096; E-P 110; E-P 111**
Fedorowsky, R. **E-P 025**
Fejude, A. **E-P 063**
Felix, C. **O 24; E-P 052**
Fernandes, M. **E-P 110**
Fernández, Y. **O-P 06; E-P 027; E-P 092**
Ferreira De Jesus, J.L. **E-P 068**
Fettouhi, M. **E-P 011**
Finderup, J. **O-P 21; O 23; O-P 52**
Flores, C. **E-P 045**
Folgueiras Lopez, M. **O 29**
Fonseca, M. **E-P 005; E-P 017; E-P 057; E-P 093; E-P 110; E-P 111**
Fortnum, D. **GS/ S 01**
Frank, H. **GS- S 10**
Freitas, T. **O-P 30**
Frumen Pivk, S. **E-P 064**
Furić-Čunko, V. **O-P 42**

G
Gallego, D. **GS- S 10**
Gallieni, M. **GS- S 03; GS- S 15**
Gándara, M. **E-P 108**
Gardner, G. **O 10; E-P 003**
Gardošová, M. **E-P 090**
Garofyllou, G. **O-P 39**
Gavish, Z. **E-P 051**
Gerali, M. **O 31**
Gerhák, F. **E-P 042; E-P 097**
Geron, R. **O 06; E-P 101**
Gerty, S. **E-P 062**
Gkastari, A. **O-P 10**
Gladding, S. **GS- S 01; GS- W 01**
Glushenkova, T. **E-P 007**
Goland, E. **O-P 25**
Golik, K. **O-P 19**
Golland, J. **O 06; O-P 45**
Gomes, F. **O 03; O-P 08; O-P 30**
Gomes, N. **O-P 20; O-P 54**
Goncalves, C. **O 03; O-P 08; O-P 30;**
Goncalves, P. **O-P 07; E-P 096**
Gonçalves, V.G. **GS- S 06**
Górecka E. **E-P 072**
Görgen, Ö. **O 22**
Gorgulu, N. **E-P 080; E-P 081**
Goubert, L. **O 13**
Graho N. **O-P 44**

Greemberg, Z. **O-P 25**
Gribets, R. **E-P 051**
Grzybowska, S. **E-P 060**
Guerrero, E. **O-P 01**
Guerrero, J. **O-P 01**
Gul, S. **E-P 076; E-P 077; E-P 078**
Gursu, M. **O-P 17**
Gutman, I. **E-P 055**

H.
Habib, A.M. **O-P 16**
Hais, R. **E-P 100**
Haj, E. **O 17**
Halutzi, B. **E-P 025**
Harrung, H. **E-P 022**
Hasan, K. **E-P 006**
Healy, H. **O 11; O-P 40; E-P 002**
Henriques, V. **E-P 063**
Hermansen, H. **E-P 109**
Hermelin, M. **E-P 038**
Hernan, D. **O-P 01**
Herrera-Morales, C. **O-P 27**
Hlaváčková, I. **E-P 087**
Hoekstra, B. **GS- S 16**
Holvoet, E. **O-P 03; O 13; E-P 089**
Horváthné Cs. **E-P 050**
Hoy, W.E. **O 11; O-P 40; E-P 002**
Ho Wong, T.M. **O-P 27; O 29; GS-W 06**
Hrenczuk, M. **GS- S 21**
Hrdan, N. **E-P 083**

I
Idowu, D. **O 25**
Iliescu, I. **E-P 032**
Inci, A. **E-P 076; E-P 077; E-P 078**
Infection Prevention Team Uz Brussel **E-P 026**
Irzyniec, T. **O 30**
Israely, R. **O-P 02**
Iterská, S. **E-P 019**
Iveković, M. **E-P 066**
Ivičinec, B. **O-P 044**

J
Jain, N. **O 25; GS-S 22**
Jakab, A. **E-P 082**
Jandu, S. **O 25**
Janovská, M. **E-P 117**
Janus, A. **O-P 50**
Jaranay, A. **O-P 33**
Jarczewska-Głośnicka, B. **O 30**
Jazvić, E. **O-P 44**
Jelakovic, B. **E-P 065**
Jenkins, K. **GS- S 12**
Jensen, J. K. D. **O-P 21**
Jeřábková, H. **E-P 018; E-P 049**
Jesus, J. **E-P 063**
Johnston, W. **GS- W 05; GS- S 20**
Junyent-Iglesias, E. **O-P 27**
Jurado-Pellicer, R. **O-P 51**

K
Karakoc, A. **E-P 035; E-P 080; E-P 081**
Karanovic, S. **E-P 065**
Kark, A. **O-P 40**
Katalenić, L. **E-P 066**
Kavalieratou, A. **O-P 39**
Kayabasi, H. **E-P 080; E-P 081**
Kazancioglu, R. **O-P 17**
Kellly, M. **GS- S 01**
Kennedy, S. **E-P 062**
Keresztesi, S. **E-P 042; E-P 097**
Khasakiya, M. **E-P 025**
Khatib, N. **E-P 006**
Kiroglou, E. **O-P 10**
Kirpitçi, E.Ş. **E-P 053**
Kisiel, M. **E-P 104**
Kiss, I. **E-P 050**
Kisvarga, Z. **E-P 082**
Kitsouli, D. **O-P 10**
Klačinski, S. **O-P 42**
Klaric, H. **E-P 070**
Kliś A. **GS- W 03**; **O-P 11; GS- W 09; O 30**
Kogal, F. **O-P 48**
Kokowska, B. **O-P 14**
Kolesárová, G. **E-P 117**
Konakci, G. **O-P 37**
Koren, M. **E-P 061**
Körtvélyesiné Bari, K. **E-P 074**
Korzetz, A. **E-P 025**
Kotzia, M. **E-P 046**
Králová, D. **E-P 103**
Krel, C. **O-P 49**
Kristal, B. **O 06**
Krokowska, B. **E-P 039**
Krupinska, M. **E-P 039**
Krupińska, M. **O-P 14**
Kuheylan, H. **E-P 040**
Kulcsar, I. **O-P 29; E-P 001**
Kumar, N. **GS- W 06**
Kurtz, C. **O-P 45; E-P 010**

L
Ladeira, F. **E-P 028**
Lagarde, J.M. **E-P 038**
Lagesson, S. **E-P 022**
Lampreht, E. **E-P 064**
Landergren, M. **E-P 011**
Lazaridis, H. **O-P 10**
Leitao, F. **O-P 38**
Lepkowska, A. **GS- W 09**
Liber, M. **E-P 029; E-P 104**
Lino, A. **O 34**
Lioka, A. **O-P 10**
Liossatou, A. **E-P 046**
Livneh, C. **O 17**
Loiselle, M.C. **O 33**
Lomborg, K. **O-P 21**
Lopez, M.P. **GS- S 01**
López, N. **O-P 01**
Lovas, K. **E-P 050**
Lubina, Z. **E-P 070**

M
Macdougall, I. **O-P 53**
Maden, U. **E-P 076; E-P 077**
Maertens, S.J. **O-P 03**
Magalhaes, T. **E-P 005; E-P 017; E-P 057; E-P 110; E-P 111**
Mahrova, A. **E-P 004**
Makanjuola, D. **O 25**
Mangahis, E. **O-P 53**
Marçalo, A. **E-P 095**
Maretić Dumić, M. **E-P 066**
Marchao, C. **O-P 09; O 28**
Martinez Carnovale, L. **O-P 06**
Martinez, P. **E-P 108**
Martínez-Delgado, Y. **O-P 27**
Martínez, L. **O-P 06;**
Martins, A. **O-P 32**
Martins, A.P. **E-P 005; E-P 017; E-P 057; E-P 093; E-P 110; E-P 111**
Martins, P. **O-P 22; E-P 034**
Martins, V. **E-P 028**
Masiá-Plana, A. **O 16**
Matanis, A. **O-P 25**
Mateljić, R. **E-P 083**
Mateus, M. **O-P 38**
Matias, C. **E-P 034**
Matziou, V. **E-P 046**
McHugh-Larkin, A. **GS- W 10**
McCarthy, J. **GS- W 02**
Mehmedovic, N. **E-P 013; E-P 014**
Meier, M. **GS- S 01; GS- W 08**
Melero-Rubio, E. **O-P 51**
Melo, J. **O-P 07; E-P 096**
Mena-Matos, P. **O-P 26; E-P 036**
Mena-Santos, P. **O-P 22**
Meneses, S. **E-P 005**
Mezher, H. **E-P 009**
Mianowana, V. **O-P 19; E-P 060**
Mihalic, M. **E-P 065**
Michaelashvili, L. **O-P 13**
Michaud, C. **O 33**
Milosevic, D. **E-P 073; E-P 075**
Miranda, V. **O-P 22; O 26; E-P 034; E-P 036; E-P 037**
Miriunis, C. **GS – S 03; O 05; O-P 31; E-P 069; E-P 094**
Mitchell, G. **O-P 40**
Mollaoglu, M. **O-P 34; E-P 024**
Molnár, M. **O-P 43; E-P 084**
Mooney, A. **O-P 35**
Moore, S. **O 25**
Moreira, F. **O-P 05**
Mróz, A. **O-P 19; E-P 060**

N
Nagy, E. **O-P 29; E-P 001**
Nagy, M. **E-P 067**
Ncgobo, T. **O-P 33**
Nečesaná, K. **E-P 102**
Neiman, I. **O-P 02**
Neradová, A. **O 32**
Nicola-Theodorou, D. **O-P 15**
Nikolopoulou, N. **E-P 046**
Novotná, J. **E-P 105**
Nunes, I. **O 18**

O
O'connor, A. **O 33**
O´Halloran, P. **GS- S 04; GS- W 05**
Oikonomou, M. **S 09**
Ok, F. **E-P 079**
Okumiya, A. **E-P 086**
Olbrechts, C. **E-P 026**
Olmez, R. **E-P 078**
Osmanagić, J. **O-P 44**
Özdemir, Ş. **E-P 015**
Özgürsoy Uran, B.N. **E-P 053**
Ozgürsoy, B. **E-P 035**

P
Parisotto, M.T. **GS- S 01; GS- S03; O 05; O 08; O-P 26; O-P 31;**

O-P 32; O 26; O-P 38; E-P 005; E-P 007; E-P 013; E-P 017; E-P 029; E-P 037; E-P 057; E-P 063; E-P 069; E-P 093; E-P 094; E-P 096; E-P 110; E-P 111

Parraga-Diaz, M. **O-P 51**
Pařilová, L. **E-P 102**
Pecen, M. **O-P 17**
Pečolar, S. **O-P 48**
Pedreira-Robles, G. **O-P 27**
Peixoto, J. **O 02**
Pelayo, R. **E-P 108**
Peldenger, A. **E-P 006**
Pelicic, D. **E-P 112; E-P 113; E-P 114**
Pelliccia, F. **O 05; O-P 31; E-P 069; E-P 94**
Peralta, R. **O 03; O-P 07; O-P 08; O-P 30; O 24; E-P 028; E-P 052; E-P 096**
Pereira, C. **E-P 057**
Pérez Sáez, M.J. **O 29**
Piko, N. **O-P 49**
Pinheiro, J. **E-P 005; E-P 017; E-P 057; E-P 093; E-P 110; E-P 111**
Pinto, B. **O 03; O-P 08**
Pizzo, A. **O-P 26**
Ponce, P. **E-P 052**
Poole, C. **O 04**
Popescu, C. **O-P 46**
Por, M. **E-P 021**
Preda, A. **E-P 058**
Presentati, F.L. **E-P 041**
Prevyzi, E. **E-P 020**
Purtell, L. **O 11; E-P 002**
Puscas, A. **E-P 030**

R

Raes, A. **O 13**
Radojevic, N. **E-P 114**
Radovič, P. **E-P 107**
Radunovic, D. **E-P 112; E-P 113; E-P 114**
Rafaelov, I. **E-P 051**
Ramires, P. **O-P 05**
Ramires, T. **O-P 05**
Ramirez De Arellano, M. **O-P 06; E-P 27**
Ramirez-Pereira, M. **E-P 085**
Ratanjee, S. **O-P 40**
Redondo Pachon, D. **O 29**
Reid, J. **GS- S 11; GS- W 05**
Reinikka, N. **E-P 048**
Reynolds, J. **O 12**
Ribeiro, S. **O-P 54**
Ricon, B. **E-P 006**
Richards, M. **O-P 33; GS- S 15; GS- S 18**
Richards, N. **O-P 33**
Roden, M. **O-P 12; E-P 26**
Rodríguez Cejudo, A.I. **E-P 068**
Rojo, M. **E-P 108**
Romach, I. **E-P 55; E-P 56**
Romao, V. **O 03**
Rosenblum, H. **O 17**
Roussos, A. **O 31**
Rozalska, I. **O-P 19; E-P 060**
Rubio, S. **O-P 06; E-P 27**

S

Sales, C. **O-P 22; O 26; E-P 036**
Saliba, S. **E-P 006**
Sanjuan Iglesia, R. **GS- S 05; W 02**
Santos-Cunha, C. **E-P 093; E-P 110; E-P 111**
Santos-Silva, A. **O-P 22; O-P 26; O-P 36**
Sarıkaya, Am. **E-P 040; E-P 098**
Saraiva, A. **O-P 54**
Sayan, C. **O-P 17; E-P 040; E-P 098; E-P 106**
Seabra, A. **O- 08; O-P 20; O-P 32; O-P 54**
Sedgewick, J. **GS- S 01; GS- W 07; GS- S 19**
Seidel, P. **O-P 02**
Şentürk, S. **E-P 053; E-P 079**
Sequeira Andrade, J. **O-P 09**
Shani, V. **E-P 023**
Sharif, A. **O 25**
Shwarz, L. **O-P 13; E-P 061**
Schnaider, A. **E-P 061**
Sialvera Eirini, T. **GS- S 23**
Silas, L. **O- 25**
Silva, A. **O-P 07; E-P 095; E-P 096**
Silva, E. **E-P 037**
Silva, M. **E-P 095**
Silva, T. **O-P 38**
Sinisalo, N. **E-P 048**
Sinković, V. **E-P 116**
Sit, D. **E-P 080; E-P 081**
Slavicek, J. **E-P 073; E-P 075**
Snauwaert, E. **O 13**
Soares, C. **O 02**
Solskov, N. **O-P 52**
Sorensen, L. T. **O 23**
Sousa, M. **E-P 028**
Sousa, R. **O 02; O-P 07; E-P 028; E-P 096**
Srouji, F. **O-P 28**
Stevens, L. **GS- S 01**
Stojanovic, V. **E-P 114**
Storey, P. **O 25**
Sura Zaslavski, V. **E-P 100**
Svarcová, Z. **O-P 47**
Swallow, V. **GS- S 13**
Szabo, T. **E-P 021; E-P 044; E-P 099**
Szakacs, I. **E-P 001**
Szarka-Tormási, E. **E-P 042**
Szegedi, J. **E-P 043**

T

Tanhilevsky, O. **O 06**
Tavares, R. **O 22**
Terényi, J. **O-P 43**
Terzi, B. **O-P 04; O 22**
Theodosopoulos, L. **E-P 046**
Thompson, L. **O-P 55**
Tielemans, C. **O-P 12**
Tiroly, K. **E-P 044**
Tokem, Y. **E-P 035; E-P 079**
Tolsgaard, J. **O-P 45**
Toma, D. **E-P 033**
Tomazic, J. **O-P 49**
Topbas, E. **O-P 04**
Topbaş, E. **O 22**
Toth, J. **O-P 29; E-P 001**
Töz, H. **O-P 37**
Trzcinska A. **E-P 071**
Trzcińska A. **O-P 11**
Tsironi, M. **E-P 046**
Tudge, S. **O 04**
Twardowski, Z. **GS- S 02**

U

Ummuhan, M. **E-P 078**
Unal, A. **E-P 040; E-P 098**

V

Vagenknechtova, P. **O-P 23**
Vágner, O. **E-P 084**
Vaicekauskyte, I. **GS- S 01**
Valentak, K. **E-P 073; E-P 075**
Van Biesen, W. **O 01; O-P 03; O 13; E-P 089**
Van Dorpe, I. **E-P 089**
Van Herzeele, Ch. **O 13**
Van Hoecke, E. **O 13**
Van Hoorebeke, L. **O 01**
Van Ommeslaeghe, F. **O 01**
Van Malderen, P. **GS- S 07**
Van Paesschen, N. **O-P 12; E-P 026**
Vande Walle, J. **O 13**
Vanholder, R. **GS- S 17**
Vasco-Gómez, A. **O-P 27**
Vera Casanova, M. **O 29**
Verleysen, A. **E-P 089**
Vermeiren, S. **O 13**
Vernovsky, V. **E-P 061**
Vieira, F. **O 02; E-P 063**
Villa, C. **E-P 108**
Vnučáková, M. **E-P 088**
Vojancová, R. **E-P 047**
Volodina, E. **E-P 007**
Vonckx, L. **O-P 12**

W

Weise, B. **GS- W 04; GS- W 08**
White, C. **O-P 53**
Wiecek, A. **GS- S 25**

Y

Yamamoto, K. **E-P 086**
Yates, P. **O-P 40**
Yildirim, A. **O-P 41**
Yilmaz, M. **E-P 080; E-P 081**
Yilmaz, U. **E-P 076; E-P 077; E-P 078**
Yürügen, B. **E-P 024**

Z

Zaher, M. **O 17; E-P 012**
Zelker, R. **O-P 02**
Zolyomi, K. **E-P 099**
Zyga, S. **E-P 046**

DISCLAMER

The organiser takes no responsibility for any of the content stated in the abstracts. The Abstract Book contains abstracts as provided by their author, edited only for English, grammar and spelling.

Copyright © EDTNA/ERCA

All rights reserved.

No parts of this document may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopy, recording, xerography, or any information storage and removal system, without permission from the compiler.